CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, ENGINEERING SCHOOLS, READERS' WANTS, INDUSTRIAL NOTES, PUBLICATIONS.

Supplement to ENGINEERING NEWS. New York, August 18, 1904.

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PERSONAL.

Mr. Robert Budd has been elected City Engineer of Petersburg, Va.

Mr. Frank Watson has resigned as City Engineer of Marshall, Mo.

Mr. John Martin has resigned as President of the North Shore R. R. and has been succeeded by Mr. A. W. Foster, President of the California Northwestern R. R.

Prof. Frank Oliver, Acting Professor of Bridge Engineering at the University of Wisconsin last year, has accepted a position in the Engineering Department of the University of Vermont.

Mr. H. C. Phillips, Engineer Western Grand Division of Atchison, Topeka & Santa Fe Ry., has been appointed Chief Engineer of the San Francisco & Northwestern Ry., with headquarters at San Francisco.

Major J. F. Case, City Engineer of Manila, was recently in Philadelphia, Pa., inspecting the filtration plants, with a view to obtaining suggestions for the installation of a filtering system in the Luzon capital.

Mr. Dickerson G. Baker, of Willimantic, Conn., and Mr. Samuel M. Greene, of Holyoke, Mass., have entered into partnership and will open offices as Consulting Engineers in Holyoke and New York City.

Schreenwassa Kushnasami Qyeugar, of Bangalore, Mysore Province, India, is now in America for the purpose of studying American metallurgical and mining methods at the instance of state authorities of Mysore.

Mr. Enrico Cairo, General Manager, and Mr. Luigi Greppi, Mechanical Engineer for the Adriatic Railways, Italy, are now in the United States on a tour of inspection. At present they are in the Pennsylvania coal regions.

Mr. H. A. Rogers and Mr. B. H. Starr have formed a partnership under the firm name of Rogers & Starr, with offices at 827 Perry Building, Philadelphia, Pa., and will engage in a general contracting and engineering business.

Mr. E. F. Smith, of Cincinnati, O., Consulting Engineer of the Kanawha Fuel Co., has become associated with Mr. A. Y. Malcomson in the coal business, and will have charge of the sales department in the wholesale branch of the firm.

Mr. Arthur Stephen, Civil Engineer, having completed the construction of the Collingwood Dry-Dock at Collingwood, Ont., has become associated with Mr. Randolph Macdonald on the Three River Harbor Works, at Three Rivers, Que.

Mr. P. F. Fernandez has been appointed Superintendent of Public Works of Porto Rico and L. J. Proctor, Assistant. The engineers in charge of maintenance at present are: F. Montilla, San Juan; J. C. Besosa, Ponce; R. Skerrett, Mayaguez.

Mr. John Byrne has resigned the Presidency of the Pittsburg, Shawmut & Northern R. R. and has been elected to the newly created office of Chairman of the Board. He is succeeded as President by Mr. Lorenzo M. Johnson, of Chicago, Ill.

Mr. Roscoe Cornell has been appointed Manager of the branch office which the Allis-Chalmers Co. has just opened in El Paso, Tex. Mr. Cornell was formerly with the Mine & Smelter Supply Co., of Denver, and is a graduate of the Michigan College of Mines.

Mr. G. A. Richards, Bridge Engineer, has been appointed Division Engineer of the Chicago, Rock Island & Pacific, with headquarters at Chickasha, Ind. T., to succeed Mr. A. S. Zinn., who has been appointed Principal Assistant Engineer of the Choctaw District, with headquarters at Oklahoma City, Okla.

Mr. D. W. Mead, M. Am. Soc. C. E., of Chicago, Ill., has been appointed to the professorship of the newly created department of Hydraulic and Sanitary Engineering at the University of Wisconsin. Mr. Mead is a graduate of Cornell University and has been engaged in a Consulting Engineering practice in Chicago.

Herr Schultz, Under Secretary of State in the Ministry of Public Works, with three government engineers, Herren Sympher, Eger and Natorp, and also Herr Krause, a Municipal Engineer, of Berlin, have sailed for the United States to visit the St. Louis Exposition and various American cities, with the object of studying municipal and other engineering and building problems.

OBITUARY.

Volney W. Foster, President of the Webster Paving & Supply Co., died from apoplexy, Aug. 16, at Chicago, Ill. He was 56 years old.

Col. J. N. Green, a civil engineer and contractor, who is said to have built several railroads in the South, died recently at Boston, Mass.

George R. Dietrick, of the contracting and building firm of C. Dietrick & Sons, Brooklyn, N. Y., died at Huntington, L. I., Aug. 9, aged 50 years.

George A. Chalfant, former President of the Spang-Chalfant Co., iron and tube works at Etna, died in Detroit, Mich., Aug. 11, from injuries received from a fall from the third story window of his hotel while walking in his sleep.

Thomas B. Tate, a civil engineer who constructed the St. Lawrence & Lake Huron Ry., the first line of railway in Canada, died recently at Ogdensburg, N. Y., aged 90 years. Mr. Tate also supervised the construction of the Grand Trunk R. R. between Toronto and Kingston, and in 1854 constructed the Brighton & Norman line.

Geoffrey Stengel, a former Superintendent of the Monongahela Water Co., of Pittsburg, Pa., died in that city Aug. 6. Mr. Stengel was a civil engineer and had been employed on various railroads throughout the country. In the Civil War he served in the engineer corps with rank of Assistant Engineer. He was with the Monongahela Water Co. as Engineer and Superintendent for 27 years, retiring in 1891.

George Clinton Gardner, Engineer, Railroad President and Boundary Expert, died at his home in Richmond Hill, L. I., Aug. 12, aged 70 years. In 1856 Mr. Gardner was commissioned by the U. S. Government as Assistant Astronomer and Surveyor of the Northwest Boundary Survey for running and marking the 49th parallel of North Latitude. Before this he had aided in the establishment of the boundary between Mexico and this country. He resigned from the Government service in 1869, and in 1873 was elected General Superintendent of the Philadelphia & Erie Division of the Pennsylvania. After holding various offices of responsibility he became, in 1896, General Manager of the Pacific Co., of New York and Peru, and spent several years in that country. He was connected with many railroad enterprises.

ENGINEERING SOCIETIES.

COMING MEETINGS.

AMERICAN PUBLIC WORKS ASSOCIATION.
Aug. 26, 1904. Meeting for organization, at Gulfport, Miss.
SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.
Sept. 1, 2, 3, 1904. Annual meeting at St. Louis, Mo Secy., C. A. Waldo, Lafayette, Ind.
SOCIETY OF CHEMICAL INDUSTRY.
Sept. 7 to 12, 1904. Annual meeting at New York, N.Y. Gen'l Secy., C. G. Cresswell, 9 Bridge St., Westminster, London. Secy., New York Section, T. J. Parker, 25 Broad St., New York.
INTERNATIONAL ELECTRICAL CONGRESS.
Sept. 12 to 16. At St. Louis, Mo. Secy., A. E. Kennelly, Harvard University, Cambridge, Mass.
RAILWAY SIGNAL ASSOCIATION.
Sept. 13, 1904. Quarterly meeting at Chicago, Ill. (Great Northern Hotel). Secy., B. B. Adams, 83 Fulton St., New York.
ROADMASTERS' AND MAINTENANCE-OF-WAY ASSOCIATION.
Sept. 13, 14, 15. Annual meeting at St. Louis, Mo. Secy., C. E. Jones, Beardstown, Ill.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
INSTITUTION OF ELECTRICAL ENGINEERS. (Great Britain.)
Sept. 14, 1904. Joint convention at St. Louis, Mo. Secy. Am. Inst. Elec. E., R. W. Pope, 95 Liberty St., New York.
AMERICAN INSTITUTE OF MINING ENGINEERS.
Sept. 14 to 21. Annual convention at Duluth, Minn., and Houghton, Mich. Secy., R. W. Raymond, 99 John St., New York.
INTERNATIONAL ENGINEERING CONGRESS.
Oct. 3 to 8, 1904. Held at St. Louis, Mo., under the auspices of the American Society of Civil Engineers. Secy., Chas. Warren Hunt, 220 W. 57th St., New York.
AMERICAN BOILER MANUFACTURERS' ASSOCIATION
Oct. 4, 5, 6, 1904. Annual convention at St. Louis, Mo. Secy., J. D. Farasey, Forest St. and Erie Ry., Cleveland, O.
AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.
Oct. 4, 5, 6, 1904. Annual meeting at St. Louis, Mo. Secy., G. W. Tillson, Municipal Building, Brooklyn, N. Y.
AMERICAN STREET RAILWAY ASSOCIATION.
AMERICAN RAILWAY MECHANICAL AND ELECTRICAL ASSOCIATION.
STREET RAILWAY ACCOUNTANTS' ASSOCIATION.
Oct. 10 to 15, 1904. Annual meetings at St. Louis, Mo.
RAILWAY SIGNAL ASSOCIATION.
Oct. 11. St. Louis, Mo. Secy., B. B. Adams, 83 Fulton St., New York.
ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18, 19, 20. Annual meeting at Chicago. Secy., S. F. Patterson, Concord, N. H.
AMERICAN GAS LIGHT ASSOCIATION.
Oct. 19, 20, 21, 1904. Annual meeting at Washington, D. C. Secy., A. E. Forstall, 58 William St., New York, N. Y.
IRON AND STEEL INSTITUTE (Great Britain).
Oct. 24 to 26, 1904. Annual meeting at New York City. Secy., B. H. Brough, 28 Victoria St., London, S. W.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 6, 1904. Annual meeting at New York City. Secy., F. R. Hutton, 12 West 31st St., New York.
AMERICAN INSTITUTE OF ARCHITECTS.
Dec. 15 to 17, 1904. Annual meeting at Washington, D. C. Secy., Glenn Brown, Washington, D. C.

AMERICAN PUBLIC WORKS ASSOCIATION.—On Aug. 26 a meeting of manufacturers, engineers, contractors and material men interested in public work will be held at Gulfport, Miss., for the purpose of forming a permanent organization under the above title. About three-score individuals or firms who are interested in contracts for public works have given their support to the plan and most of them are expected to be present at the meeting referred to. All other persons and firms to whom the subject is of interest are invited to be present. A code of rules will be submitted for adoption at this meeting, defining bids, checks, bonds, contracts, plans, specifications, errors, estimates, payments, damages, liability, guarantees, responsibility, accidents, strikes, extras, deduction, tests, acceptance, arbitration, forfeiture, and settlement. The Great Southern Hotel, Gulfport, Miss., will be the headquarters during the meeting, which will last probably for two days.

CONNECTICUT SOCIETY OF CIVIL ENGINEERS.—The summer meeting of the society was held at New Haven on Aug. 10. It included a business session, a visit to engineering works and a dinner at Savin Rock. At the business session 24 new members were elected and a paper was read. The paper was on the new slow sand filtration plant of the New Haven Water Co., and was read by Mr. Chas. A. Ferry, of that company. Among the interesting features of the plant are: A flat 6-in. reinforced concrete roof, supported on reinforced concrete beams and columns; side-lighting of the filter beds through windows, with provision for double windows in winter; a central pipe gallery, with an operating gallery above it and laboratories above that; and ejectors for conveying the dirty sand to the ejector-washers. There are to be 12 beds, with a net filtering area of ⅓ acre each, arranged six on a side of the galleries just mentioned. There will be an 800,000-gallon covered clear water reservoir. The yield of each filter bed will be controlled by a Venturi meter.

After the paper was read a large trolley car was utilized to reach the filter plant. The trip was made in a pouring rain. Fortunately the filters afforded shelter. It is expected that the filters will be ready for placing the filtering material by Oct. 1. The other inspection trip on the program was a visit to some new gas works, being built by the New Haven Gas Co., including a retort house, coal and coke storage buildings, and a 2,000,000 cu. ft. gasholder. The coal storage building is to be 332¼ x 100 ft. in plan, with concrete sides and a tile roof. Mr. John K. Punderford is president, and Mr. J. Frederick Jackson is secretary of the society.

CIVIL SERVICE EXAMINATIONS FOR TECHNICAL POSITIONS.

TRANSITMEN, COMPUTERS, DRAFTSMEN.—Louis L. Tribus, Commissioner Public Works, Richmond Borough, New Brighton, N. Y., writes that it is likely that 30 or 40 additional men will be needed within a few days for the Richmond Borough engineering corps. Under a provision of the Civil Service Commission non-competitive examinations can be called to fill positions for 60 days, while the regular civil service lists are being prepared. It is wished, therefore, to appoint 30 or 40 transitmen and computers and topographical draftsmen at a rate of salary of $1,500 and $1,350, respectively. These appointments, of course, do not give the men any civil service standing, but simply furnishes an opportunity of securing two months' work. Any person interested should call at the office of Mr. Tribus, Richmond Bldg., New Brighton, any morning this week.

CIVIL ENGINEER STUDENT.—U. S. Civil Service Commission will hold an examination Sept. 14 and 15 at various places throughout the country to secure eligibles from which to make certification to fill existing vacancies in the position of civil engineer student in the Department of Agriculture, and other similar vacancies as they may occur. The age limit is 20 years or over, and applications will be received only from graduates in civil engineering from reputable engineering schools. Further information may be obtained by applying at once to the U. S. Civil Service Commission, Washington, D. C., for application Form 1312.

The examination will consist of the subjects mentioned below, weighted as indicated:

	Subjects.	Weights.
1.	Pure Mathematics	20
2.	Theoretical and applied mechanics	20
3.	Constructions and use of instruments (including field work)	20
4.	Materials and construction	20
5.	Elements of Construction	20
	Total	100

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close Work. Place. On file. See issue.
Aug.
•18—Reservoir, etc..Ft. Meade, S. D..P.............. 7-21
•20—Wreck removal..Wilmington, Del.S.............. 7-21
20—Building..Portsmouth, N. H.......S.............. 8- 4
22—Electric plant..Burlington, Vt...P., S. & B. S.. 7-28
22—Roads..Harrisburg, Pa..........S. & B. S..... 8-11
22—Water-works..Poland, N. Y......S.............. 8- 4
•24—Sea wall..Galveston, Tex........S. & B. S..... 7-28
27—Dry-dock..New York, N. Y.......S.............. 7-14
•27—Water system..Prescott, Ariz....P., S. & B. S.. 7-28
•30—Water-works, etc..Corinth, Miss.P. & S........ 8- 4
•31—Ditch, levees, etc..Columbus, O..S. & B. S..... 8-11
•31—Sewer system..Dansville, N. Y...S. & B. S..... 8-11
Sept.
2—Road..Harrisburg, Pa..........S. & B. S..... 8-11
2—Power house..Pittsburg, Pa......S. & B. S..... 8-18
3—Quay walls, etc..P'tsmouth, N. H.S.............. 8-11
•5—Stand-pipe..Great Falls, Mont...P., S. & B. S.. 8-11
•6—Dam, etc...Roswell, N. Mex......S.............. 7-21
10—Store house..Norfolk, Va.......S.............. 8-18
Dec.
•1—Bridge..Manila, P. I.............P., S. & B. S.. 7-28

•Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Aug. 19.Electric light line, Chicago, Ill..........Aug. 18
Aug. 20.Electric light plant, Nelsonville, O......Aug. 18
Aug. 20.Electric lighting, Ft. Harrison, Mont....Aug. 11
Aug. 22.Electric plant, Burlington, Vt............July 28
Aug. 22.Electric light plant, Thomson, Ga.........Aug. 4
Advertised, Eng. News, Aug. 4 to 25.
Aug. 22.Electric lighting, Terre Haute, Ind......Aug. 18
Aug. 22.Lighting, Los Angeles, Cal............Aug. 18
Aug. 26.Wiring, etc., Ft. Des Moines, Ia. ....Aug. 4
Aug. 31.Canal power, Chicago, Ill...............July 14
Sept. 1.Electric wiring, Norwich, Conn...........Aug. 4
Sept. 2.Power house, Pittsburg, Pa..............Aug. 11
Sept. 15.Electric light plant, Searcy, Ark.........Aug. 18

BRIDGES.

Aug. 18.Bridge, South Bend, Ind.................July 28
Aug. 19.Bridge, Clarksburg, W. Va..............Aug. 11
Aug. 19.Abutments, West Chester, Pa............Aug. 11
Aug. 20.Bridges, Terre Haute, Ind..............Aug. 11
Aug. 20.Bridge, Hatboro, Pa....................Aug. 11
Aug. 20.Bridge, Mt. Holly, N. J.................Aug. 18
Aug. 20.Bridge, Chicago, Ill....................Aug. 18
Aug. 21.Bridges and culverts, Oakland, Cal......Aug. 18
Aug. 22.Bridge, concrete, Mendota, Ill..........Aug. 18
Aug. 22.Overhead crossing, Los Angeles, Cal....Aug. 18
Aug. 22.Bridge, Newport, Ind....................Aug. 4
Aug. 22.Bridges, iron, Jamestown, N. Dak.......Aug. 11
Aug. 22.Bridge, La Junta, Colo.................Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 22.Bridge, steel, Wellington, Kan...........Aug. 11
Aug. 23.Bridge, Spokane, Wash..................Aug. 11
Aug. 24.Bridges, Paulding, O. ....Aug. 4
Aug. 25.Bridges, Buffalo, N. Y. ....Aug. 4
Aug. 27.Bridge, Cincinnati, O...................Aug. 11
Aug. 27.Bridges, Franklin, Ind..................Aug. 18
Aug. 30.Bridge, Safe Harbor, Pa................Aug. 18
Aug. 30.Bridge, Brookville, Pa...................Aug. 18
Aug. 31.Bridge, steel, Omaha, Neb..............Aug. 18
Sept. 1.Bridge, Fremont, O.......................Aug 18
Sept. 3.Bridge, Indianapolis, Ind................Aug. 18
Sept. 3.Bridge, Celina, O........................Aug. 11
Sept. 5.Bridges, Indianapolis, Ind...............Aug. 18
Sept. 5.Bridges, steel, Natchez, Miss...........Aug. 18
Sept. 6.Bridge, Martinez, Cal...................Aug. 18
Sept. 6.Bridge, steel, Mitchell, S. Dak...........Aug. 18
Sept. 7.Bridge, Redding, Cal...................Aug. 18
Sept. 7.Bridges, iron, So. Bend, Ind.............Aug. 11
Oct. 12.Bridge superstructure, Chicago, Ill......Aug. 18
Advertised, Eng. News, Aug. 18.
Dec. 1.Bridge superstructure, Manila, P. I......July 28
Advertised, Eng. News, July 28 to Dec. 1.

BUILDINGS.

Aug. 18.Post office, Wausau, Wis...............July 14
Aug. 20.Hospital, etc., Ft. Totten, N. Y...........July 28
Advertised, Eng. News, July 28 to Aug. 18.
Aug. 20.Brick, building, Portsmouth, N. H.......Aug. 4
Aug. 20.School, Martinsville, Va...............Aug. 11
Aug. 22.Jail, Sutton, W. Va.....................Aug. 11
Aug. 22.Court house, Florence, S. C..............July 21
Advertised, Eng. News, July 21 and 28.
Aug. 23.Barracks, West Point, N. Y..............Aug. 4
Advertised, Eng. News, Aug. 4 to 25.
Aug. 23.Court house, Sullivan, Ill...............Aug. 11
Aug. 24.Schoolhouse, Winchester, Ind...........Aug. 11
Aug. 24.Hospital, Philadelphia, Pa..............Aug. 18
Aug. 25.Court house, Detroit, Mich. ....Aug. 4
Aug. 25.School, Dawson, Minn. ....Aug. 4
Aug. 25.Cathedral plans (Foreign), Roumania......July 7
Aug. 27.Hot-water heating, Pt. Townsend, Wash...Aug. 4
Aug. 27.Elec. light fixtures, etc., Ft. Totten, N. Y.Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 1.
Aug. 27.Brick buildings, Ft. Andrews, Mass.......Aug. 18
Aug. 29.Post office, Moberly, Mo...................July 21
Aug. 29.Court house, Minot, N. Dak................Aug. 18
Aug. 29.Jail, Natchitoches, La....................Aug. 18
Aug. 29.Exchange building, Ft. Williams, Me....Aug. 18
Aug. 30.Several buildings, Detroit, Mich..........Aug. 18
Aug. 31.City hall, Moose Jaw, Assa...............Aug. 18
Aug. 31.Cement floors, Chattanooga, Tenn........Aug 18
Advertised, Eng. News, Aug. 18 to Sept. 1.
Sept. 2.Foundations, concrete, Pittsburg, Pa....Aug. 11
Sept. 5.Jail, Opelousas, La. ....Aug. 4
Sept. 5.Jail, Aberdeen, Miss....................Aug. 18
Sept. 6.Post office, Marshalltown, Ia. ....Aug. 4
Advertised, Eng. News, Aug. 4 and 11.
Sept. 7.Barracks, Ft. Douglas, Utah.. ....Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 8.
Sept. 7.Heating, ventilating, Ames, Ia..........Aug. 18
Advertised, Eng. News, Aug. 18 to Sept. 1.
Sept. 8.Court house, Minden, La..................Aug. 11
Sept. 8.Steam heating, Norwich, Conn... ......Aug. 4
Advertised, Eng. News, Aug. 4 and 11.
Sept. 10.High school, Missoula, Mont. ....Jun. 30
Sept. 12.Post office, Kankakee, Ill.................Aug. 11
Sept. 12.Post office, Zanesville, O................Aug. 18
Advertised, Eng. News, Aug. 18 to Sept. 1.
Sept. 14.Post office, Laramie, Wyo. ....Aug. 4
Sept. 15.Post office, Grand Haven, Mich.........Aug. 4
Advertised, Eng. News, Aug. 4 and 11.
Sep. 17.Schools, etc., Oakland, Cal...............July 28
Sept. 16.Post office, Marblehead, Mass...........Aug. 18
Sept. 22.Library work, New York, N. Y...........Aug. 18
Oct. 1.Court house plans, Manitowoc, Wis......Aug. 18

WATER SUPPLY AND IRRIGATION.

Aug. 18.Water supply and electric light, Italy....Apr. 21
Advertised, Eng. News. Apr. 14 to May 5.
Aug. 18.Reservoir, pipe, etc., Fort Meade, S.Dak...July 21
Advertised, Eng. News, July 21 to Aug. 18.
Aug. 18.Pipe, valves, etc., Youngstown, O.........Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 19.Meter manholes, Cleveland, O...........Aug. 11
Aug. 19.Cast-iron pipe and fittings, Wellsville, O.Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 20.Water mains, Seattle, Wash..............Aug. 11
Aug. 20.Water storage capacity, Ft. Howard Md...Aug. 4
Aug. 21.Water distribution system, Prescott, Ariz.July 21
Advertised, Eng. News, July 21 to Aug. 18.
Aug. 22.Pipe, pumping stations, etc., Crajova, Roumania ....July 28
Aug. 22.Water-works, Poland, N. Y.................Aug. 4
Aug. 22.Tank and tower, Wharton, Tex............Aug. 11
Aug. 22.Water-works, Myrtle Point, Ore...........Aug. 18
Aug. 23.Water-works, Wallkill, N. Y..............Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 24.Corporation cocks, etc., New York, N. Y..Aug. 11
Aug. 24.Settling basin, Iola, Kan.................Aug. 18
Aug. 24.Gate valves and hydrants, New York, N.Y.Aug. 18
Aug. 25.Tank and tower, Columbus, O..........Aug. 11
Aug. 26.Water-works, Twin Valley, Minn........Aug. 18
Aug. 26.Stand-pipe, Brockton, Mass.............Aug. 18
Aug. 27.Distributing system, Prescott, Ariz......July 28
Advertised, Eng. News, July 28 to Aug. 25.
Aug. 30.Cast-iron pipes, Java (Foreign)..........July 14
Advertised, Eng. News, July 14 and 28.
Aug. 30.Water-works, etc., Corinth, Mass.........Aug. 4
Advertised, Eng. News, Aug. 4 to 25.
Aug. 31.Pumping station, etc., New York, N. Y..Aug. 18
Sept. 1.Pipe line, Coshocton, O..................Aug. 18
Sept. 1.Canal, excavation, Goshen, N. Y........Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Sept. 2.Well, Duquesne, Pa......................Aug. 18
Advertised, Eng. News, Aug. 18 and 25.
Sept. 5.Water-works, Hawkeye, Ia..............Aug. 18
Sept. 5.Stand-pipe, Great Falls, Mont. ....Aug. 4
Advertised, Eng. News, Aug. 4 and 11.
Sept. 7.Laying mains, Portage la Prairie, Man..Aug. 18
Advertised, Eng. News, Aug. 18.
Sept. 12.Water pipe, Victoria, B. C.................Aug. 11
Sept. 15.Canals, etc., Montrose, Colo..............Aug. 4
Advertised, Eng. News, Aug. 4 to Sept. 15.
Oct. 5.Tunnel, etc., Montrose, Colo. ....Aug. 4
Advertised, Eng. News, Aug. 4 to Oct. 6.
Sept. 9.Reservoir, etc., Cincinnati, O..........Aug. 18
Advertised, Eng. News, Aug. 18

SEWERAGE.

Aug. 18.Sewers, Reading, Pa......................July 28
Aug. 19.Sewer pipe, Cleveland, O.................Aug. 11
Aug. 19.Sewers, Holland, Mich....................Aug. 18
Aug. 20.Sewers, Beaver Falls, Pa.................Aug. 18
Aug. 20.Sewer, Seattle, Wash....................Aug. 11
Aug. 20.Sewers, Lewistown, Pa..................July 28
Advertised, Eng. News, July 28 and Aug. 4.
Aug. 20.Sewers, Mount Carmel, Pa. ....Aug. 4
Advertised, Eng. News, Aug. 4 and 11.
Aug. 22.Sewage system, Washington, D. C.........July 28
Advertised, Eng. News, July 28 and Aug. 4.
Aug. 22.Sewers, Newton, Ia......................Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 22.Sewers, Glenville, O.....................Aug. 11
Aug. 22.Sewers, San Jose, Cal...................Aug. 18
Aug. 22.Sewers, Indianapolis, Ind................Aug. 18
Aug. 23.Sewer, Monticello, Ind...................Aug. 11
Aug. 23.Sewers, Hammond, Ind...................Aug. 11
Aug. 24.Sewers, Havana, Ill. ....Aug. 4
Aug. 24.Sewers, New York, N. Y...................Aug. 18
Aug. 24.Sewers, Brooklyn, N. Y...................Aug. 18
Aug. 24.Sewers, Westfield, Mass.................Aug. 18
Advertised, Eng. News, Aug. 18.
Aug. 24.Sewer, Hoboken, N. J.....................Aug. 18
Aug. 27.Sewer system, Laurel, Miss..............Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 29.Main sewer, Canton, O...................Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 29.Sewer, Washington, D. C................Aug. 18
Aug. [illegible] Sewer, Monticello, Ind......................Aug. 18
Aug. 31.Sewers, Cleveland, O......................Aug. 18
Aug. 31.Sewers, Bridgeport, Conn..................Aug. 18
Advertised, Eng. News. Aug. 18 to 25.
Aug. 31.Sewer work, Dansville, N. Y...............Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Sept. 1.Sewers, Zanesville, O.......................Aug. 18
Sept. 1.Sewers, Memphis, Tenn....................Aug. 18
Sept. 5.Sewers, Nappance, Ind.....................Aug. 18
No date.Sewers, Mt. Pleasant, Pa..................Aug. 18
No date.Sewer system plans, Perry, Ia.............Aug. 18

STREETS AND ROADS.

Aug. 18.Paving, asphalt, Columbus, Ind...........Aug. 4
Advertised, Engineering News, Aug. 4.
Aug. 18.Paving, brick, Minerva, O. ....July 21
Aug. 18.Road, Gunnison, Colo......................Aug. 11
Aug. 18.Paving, Columbus, Ind.....................Aug. 11
Aug. 18.Macadamizing, etc., Covington, O.........Aug. 11
Aug. 20.Paving, asphalt, Des Moines, Ia...........Aug. 11
Aug. 20.Walks, Fort Du Pont, Del...................Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 20.Macadamizing, etc., Haskins, O...........Aug. 11
Aug. 20.Road, gravel, Winamac, Ind...............Aug. 11
Aug. 20.Grading, Tolland, Conn....................Aug. 18
Aug. 22.Macadamizing, Bowling Green, O.........Aug. 11
Aug. 22.Roads, Harrisburg, Pa.....................Aug. 11
Aug. 22.Paving, vitrified brick, Lincoln, Neb....Aug. 18
Aug. 22.Paving, etc., Morris, Ill..................Aug. 18
Advertised, Eng. News, Aug. 18.
Aug. 22.Sidewalks, Williston, N. Dak............Aug. 18
Aug. 23.Graveling Tell City, Ind...................Aug. 18
Aug. 23.Grading, etc., Cleveland, O...............Aug. 18
Aug. 24.Paving, brick, Wilmette, Ill...............Aug. 18
Aug. 24.Paving, brick, So. Bend, Ind..............Aug. 18
Aug. 24.Sidewalks, concrete, Brooklyn, N. Y....Aug. 18
Aug. 25.Paving, granite, New York, N. Y.........Aug. 18
Aug. 25.Paving and curbing, Wellsville, N. Y....Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 25.Paving, etc., Salisbury, N. C.............Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 25.Paving brick, Jerseyville, Ill. ....Aug. 4
Aug. 26.Paving, vitrified brick, Cincinnati, O.....Aug. 11
Aug. 26.Sidewalks, cement, Indianapolis, Ind....Aug. 18
Aug. 27.Paving, Pittsburg, Pa......................Aug. 18
Aug. 29.Curbing, Muncie, Ind......................Aug. 18
Aug. 29.Roads, Bowling Green, O..................Aug. 11
Aug. 29.Paving, etc., Cambridge, O...............Aug. 11
Aug. 29.Macadamizing, Oshkosh, Wis.............Aug. 11
Aug. 29.Paving, etc., Norfolk, Va..................Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Aug. 30.Paving, New Brighton, N. Y..............Aug. 18
Aug. 31.Graveling, Wapakoneta, O...............Aug. 11
Aug. 31.Paving, etc., Cincinnati, O...............Aug. 11
Aug. 31.Roads, Cleveland, O.......................Aug. 11
Sept. 1.Roads, Fort Du Pont, Del..................Aug. 11
Advertised, Eng. News, Aug. 11 and 18.
Sept. 2.Road, Harrisburg, Pa......................Aug. 11
Sept. 3.Roads, Ottawa, O..........................Aug. 18
Sept. 5.Roads, Bowling Green, Ind.................Aug. 18
Sept. 5.Roads, gravel, Greenburgh, Ind...........Aug. 18
Sept. 5.Macadamizing, Glenville, O...............Aug. 11
Sept. 6.Macadamizing, etc., Cincinnati, O........Aug. 18
Sept. 7.Road, Ukiah, Cal...........................Aug. 18
Sept. 8.Paving, Xenia, O...........................Aug. 18
Sept. 12.Road, Harrisburg, Pa.....................Aug. 18
Sept. 15.Paving, brick, Barnesville, O............Aug. 11
Oct. 3.Road, Yuma, Ariz...........................Aug. 11
No date.Paving, brick, Morris, Ill..................July 21
Advertised, Eng. News, July 21 to Oct. 13.

MISCELLANEOUS CONTRACTS.

Aug. 18.Stone placing, Portland, Me. ....July 21
Advertised, Eng. News, July 21 to Aug. 18.
Aug. 18.Boiler, Youngstown, O.....................Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 19.River work, Wellsville, O..................Aug. 11
Advertised, Eng. News, Aug. 11.
Aug. 20.Wreck removal, Wilmington, Del. ....July 21
Advertised, Eng. News, July 21 to Aug. 18.
Aug. 20.Street sweeping, Evansville, Ind.........Aug. 11
Aug. 22.Canal, New Orleans, La..................July 14
Aug. 23.Machine tools, Washington, D. C. ......July 21
Aug. 24.Excavating, cofferdams, Chicago, Ill. ....Jun. 30
Aug. 24.Sea wall, Galveston, Tex.................July 28
Advertised, Eng. News, July 28 to Aug. 25.
Aug. 24.Stone-crushing plant, Chicago, Ill.......Aug. 18
Aug. 25.Excavation, Crysler, Ont.................Aug. 18
Aug. 25.Cement, Minidoka, Idaho. ....July 21
Advertised, Eng. News, July 21 to Aug. 18.
Aug. 26.Floating boat house, Washington, D. C..Aug. 18
Aug. 26.Garbage plant, Elmira, N. Y.............Aug. 18
Aug. 27.Dry-dock, New York, N. Y..............July 14
Aug. 31.Ditch, levees, etc., Columbus, O.........Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 1.
Sept. 1.Levees, sewers, etc., Memphis, Tenn.....Aug. 4
Advertised, Eng. News, Aug. 4 to Sept. 1.
Sept. 1.Garbage removal, etc., Philadelphia, Pa...Aug. 11
Sept. 2.Tile drain, Green Valley, Ill.............Aug. 18
Sept. 3.Quay walls and pier, Portsmouth, N. H.Aug. 11
Sept. 5.Elevator, etc., Washington, D. C.........Aug. 11
Advertised, Eng. News, Aug. 11.
Sept. 6.Dump boat, St. Louis, Mo.................Aug. 11
Sept. 6.Dam, etc., Roswell, N. Mex. ....July 21
Advertised, Eng. News, July 21 to Sept. 1.
Sept. 6.Garbage furnace, Crafton, Pa............Aug. 18
Sept. 8.Lock gates and anchorages, Pittsburg, Pa.Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 8.
Sept. 9.Steel, iron, etc., Chicago Ill............Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 8.
Sept. 10.Window and door screens, Prescott, Ariz. Aug. 4
Advertised, Eng. News, Aug. 4 to Sept. 1.
Sept. 10.Store house, Norfolk, Va................Aug. 18
Sept. 13.Crib removal, Cleveland, O..............Aug. 18
Advertised, Eng. News, Aug. 18 to Sept. 1.
Sept. 22.Telephone system, Montrose, Colo......Aug. 18
Advertised, Eng. News, Aug. 18 to Sept. 29.
Sept. 22.Library stack work, New York, N. Y....Aug. 11
Oct. 12.Embankment, Chicago, Ill..............Aug. 18
Oct. 15.Tug boat, Cuba...........................Aug. 18
Oct. 15.Plans for harbor, Sweden (Foreign)....April 21
Nov. 10.Docks, moles and forts, Chili............Aug. 18

RAILWAYS.

ATLANTA, KNOXVILLE & NASHVILLE.—W. J. Oliver, of Nashville, has been awarded the contract to rebuild a portion of this road, 60 miles in length, from Knoxville to Wetmore, Tenn. Cost, about $2,000,000. Mention was made in last week's issue of a contract granted Mr. Oliver for 62 miles of similar work in that section that may have been the same award.

BALTIMORE & OHIO.—Construction of a $300,000 freight house at this place is contemplated.

BRUNSWICK & BIRMINGHAM.—This road has been sold to the Knickerbocker Trust Co., New York, and will at once become the property of the Atlantic & Birmingham R. R.

COLORADO MIDLAND.—Plans are stated to have been prepared and submitted to Frank Trumbell, Denver, Colo.,

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Pres., for proposed improvements of this road, which are to include improvement of the roadbed, better shop equipment and new rolling stock.

COLORADO & SOUTHERN.—It is stated that this road will soon build an extension from Fort Collins, Colo., to Cheyenne, 40 miles. H. W. Cowan, Denver, Colo., is Ch. Engr.

FLORIDA EAST COAST.—It is announced that this road will extend its line from Miami, Fla., through the Keys to Key West. The whole road will have to be built on piling. R. T. Goff, St. Augustine, Fla., is Gen. Supt.

GAINESVILLE MIDLAND.—This company which was organized to operate the Gainesville, Jefferson & Southern is said to be planning to make various extensions and to build spur tracks. George J. Baldwin, Savannah, Ga., is interested.

GREAT NORTHERN.—It is stated that the new line which is now being constructed from Bismarck, N. Dak., southwest toward Minot, is to be extended from the North Dakota Capital to Sioux City, Ia.

INTERNATIONAL & GREAT NORTHERN.—Building of branch line from Mertens to Dallas, Tex., via Ennis is said to be under consideration.

INTERSTATE.—Contracts for building the first 400 miles of this road, which projects a line from Kansas City to Duluth, are stated to have been let to the Quigley Construction Co., St. Louis, Mo. The work will be in charge of A. C. Titus, Ch. Engr., and will be pushed from the Southern terminus. It is stated that active operations will be commenced at once.

KEOLE VALLEY RY.—Preliminary surveys for this road have been completed to a point eight miles north of Grand Forks, B. C., and second corps of engineers are making location surveys. Actual construction work will not be undertaken this year, but the road will probably be built before next fall to Franklin Camp, 45 miles north of Grand Forks.

LOUISVILLE & NASHVILLE.—It is reported that this road has secured a right of way into Atlanta from Kennesaw.

MENA, HOT SPRINGS & EASTERN.—Surveys have been made and it is expected to begin construction work by Oct. 1, on this road, which is to extend from Mena, via Black Springs, to Hot Springs, Ark., 85 miles. W. A. Carroll, Mena, Ark, is Pres., and G. H. Cravens, Mena, Ark., Ch. Engr.

MOBILE & OHIO.—Woolsey Finell, Tuscaloosa, Ala., has been awarded contract for constructing several miles of track near Meridian, Miss., to various plants near that city.

NEW ORLEANS, HOUMA & NORTHWESTERN.—James Civigliano, Gibson, La., writes that all right of way has been secured and surveys made. Capital for construction also received. It is estimated that the construction of the road will cost from $6,000 to $8,000 a mile, making the total cost of building the line about $1,500,000. Company was incorporated to build a line from New Orleans to Lone Star, Tex., via Houma, Gibson and Morgan City. This road was chartered in December, 1900, and the location surveys were made in 1902. The incorporators were Joseph A. Humphreys, of Lexington, Ky., who is Pres.; R. W. Nelson, of Newport, Ky., and Frank T. Helm, of Covington, Ky. Mr. Civigliano writes that contracts for this work are yet to be awarded.

NIAGARA TRANSFER R. R. CO.—New York State Railroad Commissioners have granted this road a certificate of necessity, allowing it to construct a steam road from Dearborn and Parish Sts., Buffalo, to Kohler St., Tonawanda, along the Niagara River.

NORTHWESTERN TERMINAL R. R.—This company which was organized by the Denver, Northwestern & Pacific R. R., with authorized capital of $2,500,000, is to secure right of way to build terminal railroad in Denver for the above line. Passenger and freight stations, yards and terminal facilities in general will be constructed.

OREGON RAILROAD & NAVIGATION CO.—This company has decided to build a railroad from Arlington to Condon, in Gilliam County, Ore. E. E. Calvin, Gen. Mgr., Portland, Ore., has recently made trip to the country which will be touched by the road, and announces that work on the line will begin soon. Engineers will take the field at once, and the route will be decided upon. The new line will be between 45 and 50 miles long, and Arlington and Condon will be the terminals.

RIO GRANDE & NUECES VALLEY.—It is stated that the contract for the construction of the first 20 miles of track of this road, which is to run from Cotulla, Tex., to Carrizo Springs, Tex., a distance of about 40 miles, has been let to Ward & Lee, Palestine, Tex.

SYRACUSE, SKANEATELES & MORAVIA R. R.—Application has been made to State Railroad Commissioners of New York, for leave to issue mortgage of $1,500,000. The road is promoted by Wing T. Parker of Moravia, and it is proposed to build from Moravia to Mandana down the west shore of Skaneateles Lake to Skaneateles and thence to Mottville, Camillus and Syracuse.

TEXAS.—A survey is being made for a proposed railroad to be built from Umbarger south to Lubbock, Tex., a distance of about 100 miles. The proposed road will connect with the Pecos Valley Division of the Santa Fe at Umbarger, and it is reported that that road is back of the project. A committee of Hereford, Tex., citizens, consisting of Judge J. E. Ferguson, L. Gough, J. P. Slayton and S. H. Mount, has been appointed to ascertain if the promoters of the road will consider a proposition to build the line from Hereford.

TOLEDO, WALHONDLING & OHIO.—It is reported that the Pennsylvania is preparing to rebuild and re-equip the old Walhondling branch of this road and make it a feeder for the Fort Wayne and Pan Handle. The branch connects the two divisions and it will be designed to provide a short cut from one to the other.

WHITE PASS & YUKON ROUTE.—This road, according to reports, from Yukon, which lack confirmation, has definitely decided to extend its system several hundred miles further into the interior, the purpose being to serve the newly opened Tanana Country. J. P. Rogers, is Supt., Skagway, Alaska.

WYOMING CENTRAL.—The sum of $10,000,000 is said to be now available for building this road between Casper and Lander, Wyo. Details of construction were settled some time ago, and contracts will now be signed with Kilpatrick Bros. & Collins, Denver, Colo., for the work. The road will be built west from Orin Junction through Douglas and Casper to Lander, 250 miles. A branch line will be run from Casper to the oil fields of the company at Salt Creek, 75 miles north of Casper, and another branch to the famous Thermopolis hot springs, making a total length of 350 miles.

NEW INCORPORATIONS AND CHARTERS.

ARIZONA & COLORADO.—Colo.—This company has filed articles of incorporation to build a railroad in Colorado, New Mexico and Arizona. Branch lines will extend from Durango, Colo., to Silverton and Dolores. The road will connect with the Southern Pacific. The route of the road in Colorado will be from a point at the intersection of the Animas River and the Colorado-New Mexico boundary line, north to Durango. From Durango, two branches will be laid, one through Montezuma County to Dolores and the other in San Juan County to Silverton. Capital stock, $2,000,000. Incorporators: Epes Randolph, E. A. McFarland, Eugene F. Ives, L. H. Manning and Charles E. Walker, all of Tucson, Ariz.

BETHEL GRANITE RY.—Vt.—Company has been incorporated to build a line from Bethel and Royalton to the quarries of the E. B. Ellis Granite Co. It will be about five miles in length. Company is capitalized at $50,000. C. M. Hays, E. H. Fitzhugh, C. W. Witters, W. E. Mullins, officials of Central Vermont R. R., are interested.

CAMBRIA & SOUTHERN.—Tenn.—A charter has been granted this line, which runs from Wetmore, on the Atlanta, Knoxville & Northern Ry., to the Georgia state line. A charter will be obtained in Georgia for the road to run from this point to Cartersville, on the Atlantic & Western road. This is the new through line of the Louisville & Nashville road to the south. Large shops will be erected at Camden, Tenn.

COLUMBIA RIVER & OREGON CENTRAL.—Ore.—Incorporation articles have been filed. Capital stock not given. J. C. Ainsworth is Pres. The line will run from Arlington to Condon, from Ione to Condon and from Arlington to Rock Creek.

DEAN RAILROAD CO.—Pa.—A charter has been issued to the Dean Railroad Co., of Ebensburg, to build two miles of road in Cambria County from the Cambria and Clearfield line, in Dean Township, to the land of Aaron Dull. The company is capitalized at $22,000. F. J. Hartman, of Ebensburg, is Pres.

KANSAS CITY & TULSA SOUTHWESTERN.—Ind. T.—This company has been incorporated by C. B. Lynch, W. A. Cook and others, of Tulsa, Ind. T.; O. J. Allen, Frank Coombs, Major Moberly and Le Vanwinkle, of Oklahoma City, Okla. The line, as projected, will be about 250 miles long from a point on the St. Louis & San Francisco Railroad in the Indian Territory to Wichita Falls, Tex., with a branch from Shawnee to Oklahoma City. Permanent surveys are now reported being made. W. H. Hendron, Tulsa, I. T., is Engr.-in-Charge.

MISSOURI & ILLINOIS BRIDGE & BELT RY.—Mo.—A company with $2,500,000 cap. stock has been incorporated to build a railroad 15 miles long from the tracks of the Wabash system, near Ferguson, Saint Louis County, Mo., to connect with the St. Clair, Madison & St. Louis Belt Railroad, near Saint Charles, and across the bridge over the Mississippi on the tracks of the St. Clair, Madison & St. Louis Belt Railroad, to connect with any railroad line entering East St. Louis, Ill. Incorporators: Joseph Ramsey, Jr., A. J. Davidson, B. L. Winchell and others.

SALINE VALLEY.—Mo.—Company has been incorporated to construct a railroad from Lithium, on the Cester, Perryville & Ste. Genevieve, in a northwesterly direction to Saline River, thence up the river connecting with the St. Louis, Iron Mountain & Southern. Line will pass through the counties of Perry, Ste. Genevieve, Saint Francois and Madison. About 40 miles. Incorporators are John Tlapek, Giboney Houck, R. B. Andrews and others. Capital stock, $400,000.

SHORT CREEK VALLEY.—O.—Incorporated to build a railway from New Athens, in Harrison County, to Dillonvale, in Jefferson County, a distance of about 16 miles. Capital stock, $100,000. Milton I. Baird, Alexander W. Stevenson and others, all of Pittsburg, are incorporators.

SOUTH ATLANTIC & MEXICAN GULF.—Ga.—Company has been chartered, with capital of $3,000,000, to build a railroad from Savannah southwest to a point on the Gulf of Mexico, 325 miles. P. H. Comas and F. J. Sweat and others, of Savannah, are incorporators.

STREET AND ELECTRIC RAILWAYS.

AUBURN, ME.—John A. Jones, C. E., of Lewiston, has begun making plans for the Auburn-Turner electric railroad. The survey will soon be made.

COHOES, N. Y.—It is reported that the Schenectady Ry. Co. proposes building a trolley line from Schenectady to Cohoes via Waterford. E. F. Peck, of Schenectady, is Gen. Mgr.

ROCHESTER, N. Y.—The directors of the Rochester, Syracuse & Eastern electric railroad have voted to commence the construction of 45 miles of double track east of Rochester. Thos. M. Mather, of Syracuse, is Ch. Engr.

LANCASTER, PA.—The Philadelphia, Coatesville & Lancaster Passenger Ry. Co. has filed the route of a proposed extension through Southern Lancaster County, thence across the Octorail Creek to Chester County, and ending at Oxford. The present terminus is at Georgetown.

IRWIN, PA.—The Council of Manor has granted the Pittsburgh & Westmoreland Ry. Co. a franchise to build its line in the borough. The line will be a part of the Irwin-McKeesport project. It will run from Irwin through Rillton, Madison and Edna No. 2 to Herminie via Shafton and Westmoreland City.

WILKINSBURG (Sta. Pittsburg), PA.—Borough Council passed the ordinance granting the Wilkinsburg, Turtle Creek & East Pittsburg Street Ry. Co. permission to construct tracks on certain streets in the borough.

WILMINGTON, DEL.—Work will be begun shortly on the Delaware Suburban Ry. Co.'s line from Wilmington to Elkton, a distance of 20 miles. A power plant will be erected at Newark. B. F. Myers, of Harrisburg, Pa., is Pres. The capital of the company is $500,000.

ROANOKE, VA.—At a meeting of the directors of the Virginia & North Carolina Electric Ry. Co., held in Roanoke July 28, the report of the Engineering Co. of America on the proposed route from Roanoke to Mount Airy, N. C., was submitted and on motion was received and adopted. No offer was made by the engineering company to build the road, as definite plans along that line have not yet been determined upon. S. R. Brame, Pres., has been authorized to secure information as to the probable freight and passenger traffic which might be expected along the proposed line. As soon as this and other information have been complied the company will be in a position to open negotiations for building the road. E. B. Jacobs, City, is Secy. The above is a correction of the report which appeared in this paper Aug. 4, under Williamson, W. Va., of the same meeting.

BIRMINGHAM, ALA.—The stockholders of the Birmingham Railway, Light & Power Co., at a special meeting, voted to issue $10,000,000 of bonds. A certain amount from the sale will be used to retire outstanding bonds. A greater part, however, will be used in carrying out improvements now under headway or projected. R. Jennison is Pres.

GREENVILLE, MISS.—A company known as the Greenville & Leland Electric Railroad Co. has been organized here for the purpose of constructing an electric railway line from Greenville to Leland, a distance of 15 miles.

GULFPORT, MISS.—Plans for the connection of the various cities of the Mississippi Gulf Coast are said to be rapidly maturing, through the work of the promoters of the Gulf Coast Electric Ry. Co. Permanent organization has just been completed, with O. S. Williams as Supt. of Const. The line contemplated will be about 40 miles long, not including city branches.

VICKSBURG, MISS.—We are informed that the Vicksburg Railway & Light Co. will not extend their system of street railways this year. E. E. Bullis, City, is Supt.

KNOXVILLE, TENN.—The Knoxville Traction Co. is to spend over $600,000 in improvements and extension in Knoxville. C. H. Harvey is Gen. Mgr.

ZANESVILLE, O.—The contract for building a part of the tracks of the Southeastern Ohio Railway, Light & Power Co. was awarded to F. H. Blodgett, of Wheeling, W. Va.

MUNCIE, IND.—A movement has been started to construct a traction line from Dunkirk and Redkey to Eaton, where direct connection may be made for Muncie, Indianapolis and way stations. It is said that the Muncie, Hartford City & Ft. Wayne Traction Co. is behind the project.

SOUTH BEND, IND.—Walter C. Nelson, Pres. Northern Traction Co., filed a mortgage of $3,500,000 to the Knickerbocker Trust Co., of New York. The mortgage covers a proposed electric car line from South Bend to Chicago, through New Carlisle, Laporte, Valparaiso and Hammond.

ALMA, MICH.—The Common Council has granted a franchise for the construction of an electric road connecting Alma, St. Louis and Ithaca. The franchise was granted in the name of Frank M. Ohl.

GRAND RAPIDS, MICH.—Work on the new electric road to be built between this city and Kalamazoo will be started this month. The name of the road will be the Grand Rapids & Kalamazoo Valley railway. Wells & Co., contractors, will build it.

KALAMAZOO, MICH.—G. A. Mullins of the Kalamazoo & Lake Shore Traction Co. was granted a franchise by the City Council.

CHICAGO, ILL.—By an order of Judge Tuley, Edward F. Bryant, receiver for the Chicago General Railway Co., was authorized to spend $83,000 in improving the street railway system of the company. The money will be used to pave the right of way in 22d St., to pay taxes, to redeem notes, to complete tracks in Ashland Ave., and to increase the number of cars from 20 to 24.

ROANOKE, ILL.—The Council has granted a franchise for an electric line to pass through Roanoke from Peoria to Streator, touching Morton, Eureka, Minonk and Wenona.

MILWAUKEE, WIS.—An electric railway between Milwaukee and Beloit to connect with the Beloit-Janesville line is a possibility, and a movement is said to be under way to secure possession of the old Milwaukee-Beloit railway grade and right of way with that view. Milwaukee capital and electric railway promoters are supposed to be behind the movement.

DES MOINES, IA.—Another proposed electric line from Omaha and Council Bluffs to Des Moines is projected. It is to run via Carson, Griswold, Greenfield and Winterset. It will be 150 miles in length and cost $3,000,000. It is supposed that the road will use the fourth bridge soon to be built over the Big Muddy at Omaha.

ARNOLD, NEB.—The Loup Valley Electrical R. R. Co. has been incorporated by Jacob Miller, A. J. Moran, et al., for the purpose of building an electric railway from Broken Bow via Arnold and running through Lincoln, Logan and Custer counties and terminating at Gandy.

AURORA, NEB.—Articles of incorporation have been filed with the County Clerk by the Omaha & Nebraska Central Railway. The names of the incorporators are Anthony Texter, Chas. J. Heim, Chas. H. Deeter, Frank J. Helm and Anthony G. Buski. The authorized capital of the company is $1,500,000. It is the purpose of the company to construct and operate an electric railway from Omaha to Hastings. The promoters are Chicago men.

LARAMIE, WYO.—It is reported that H. D. McCutcheon and J. D. Boyle, of Pittsburg, have been granted a 30-year franchise by the city to build an electric railway system.

ST. LOUIS, MO.—The Missouri & Illinois Bridge & Belt Railroad Co. of St. Louis was chartered. The company has a capital stock of $2,500,000, and the directors are Jos. Ramsey, Jr., A. J. Davidson, B. L. Winchell, M. H. Smith, James McCae, O. G. Murray, Geo. J. Gould, E. T. Jeffreys, and M. E. Ingalls. The road is to extend from the tracks of the Wabash system, near Ferguson, in St. Louis County, and connect with the St. Clair, Madison & St. Louis Belt railroad near St. Charles, and across the bridge over the Mississippi on the tracks of the St. Clair, Madison & St. Louis Belt railroad, to connect with any railroad line entering East St. Louis, Ill. The total distance will be 15 miles.

BEAUMONT, TEX.—The County Commissioners have granted a franchise to Geo. Woodward, D. L. Burch and John A. Young and associates of Port Arthur, for a right of way over the old Beaumont, Port Arthur and Sabine Pass public road for an electric line to extend from Port Arthur to the Port Arthur docks, a distance of three miles.

LONGVIEW, TEX.—Frank Remberts and G. D. M. Grigsby, who are the principal owners of the Texas, Sabine Valley & Northwestern Railroad, contemplate extending the road from Center to Shreveport, La., and to operate it with electric power.

McKINNEY, TEX.—It is stated that H. Woodson, representative of a syndicate promoting the building of an interurban electric railway between McKinney and Bonham, is making satisfactory progress with the preliminary arrangements for the fulfillment of the enterprise. It is understood that the stock has been subscribed by Chicago parties to the amount of $1,000,000. The road will be about 40 miles long. Hon. Rosser Thomas, of Bonham, can inform.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

OKLAHOMA, OKLA.—The final survey for the proposed electric line to be built from Oklahoma City to Sulphur Springs has been completed. As soon as the necessary capital is obtained the company will start active operations.

LOVELAND, COLO.—An ordinance was passed by Board of Trustees granting a franchise to the Northern Colorado Electric Ry. Co. The proposed road is to run through Eaton, Berthoud, Longmont and Boulder to Denver.

SPOKANE, WASH.—Local press reports state that an electric railroad from Columbia Siding, near Rock Island on the Columbia River will be built to Bridgeport, a distance of 92 miles. Cost $1,200,000. A. Bettes is the chief promoter of this project. The survey for the road is said to be 92 miles, with 8 miles of siding, making 100 miles in all. Work will start next fall. Power for the plant will be developed at the Chelan Water Power Co.'s plant.

PORTLAND, ORE.—The Mount Hood Electric Co. was incorporated here for the purpose of supplying this city with electricity for commercial uses, and it is also said to be the intention of the company to build a trolley line to the base of Mount Hood. The power is to be obtained on the Sandy River, about 25 miles east of this city. The company is capitalized at $1,000,000. The incorporators are C. W. Miller, City; G. W. Waterbury, also of Portland, and Edwin D. Whitney of Chicago.

SALEM, ORE.—The Portland Southern Electric Ry. Co. has been incorporated with $1,000,000 cap. stock. J. H. Albert, City, is one of the incorporators.

HOLLISTER, CAL.—The San Benito Improvement Club has adopted a resolution indorsing the proposed electric road extension from Watsonville to this place, and promising to aid its early completion.

LIGHT, HEAT AND POWER PLANTS.

GLASTONBURY, CONN.—The Glastonbury Power Co. has received from its engineer the completed plans of the hydro-electric plant which the company proposes to build on Roaring Brook in South Glastonbury. The plans call for the development of 1,000 HP. of wheels and 1,000 KW. in electric units. There will be two large dams, a 500-ft. penstock, a 2,500 ft. tail race, a steel and concrete power house, with a 10-ton traveling crane, and an auxiliary gas plant. The general contract will shortly be awarded.

CAMDEN, N. J.—The Water Committee of City Council received the following bids for installing an electric light plant at Morris Station: Henry Morgan, $2,169; S. Pressey, $2,115; Walker & Keppler, $1,903; General Electric Co., $2,180.

PITTSBURG, PA.—Specifications and bidding sheet for building a power house at Dam No. 2, Ohio River, are on file at office of Engineering News. Bids are asked by Wm. L. Sibert, Maj. Engrs., until Sept. 2.

BALTIMORE, MD.—Subway Engineer Phelps is preparing an estimate of the cost of establishing a municipal lighting, heating and power plant in the vicinity of Central Market space.

BAINBRIDGE, GA.—E. A. Urinberly, Cy. Clk., writes us that the city will probably buy the plant of Missbaum Bros. $5,000 will be expended on improvements.

GRAHAM, N. C.—The Town Commissioners have voted to install water and electric lights in the town. The Southern Service Corporation of Washington, D. C., will do the work.

KISSIMMEE, FLA.—H. M. Pfann, Chn. Electric Light Com., is considering bids for erecting a new plant and new machinery.

MONTGOMERY, ALA.—The Cherokee Development & Mfg. Co., which is to build an immense power plant on the Tallapoosa River, and furnish electric power to Birmingham, has increased its capital stock from $50,000 to $100,000. The headquarters of the company is in Montgomery.

AMITE CITY, LA.—The Amite Light & Power Co., Ltd., capitalized at $30,000, has been organized with the following officers: Dr. C. S. Stewart, president; D. H. Hull, vice-president and manager; F. E. Mayer, secretary and treasurer. The object of the company is to run a light and power plant, manufacture ice and put in water-works. The company has acquired the plant of Saal & Senter, and will at once enlarge it, installing new machinery and dynamos. Work on the water-works will be begun as soon as possible. The company will soon begin the erection of a two-story brick and iron building.

SIDNEY, O.—The Citizens' Light, Heat & Power Co. has incorporated with $150,000 capital stock. Andrew Dobbie and Geo. T. Spahr, both of Columbus, are interested.

NELSONVILLE, O.—Bids are asked by Board Public Service until Aug. 20 for erecting a complete electric light plant. Plans and specifications on file with W. H. Parks, Secy. John T. Morris, of Columbus, Consult. Engr.

TERRE HAUTE, IND.—It is reported that bids are asked by Board Public Works until Aug. 22 for lighting of the city by electricity.

JASPER, IND.—The contract to construct a power house for the municipal electric lighting and water-works plant has been awarded to Schmidt & Renner, for $12,182.

CHICAGO, ILL.—Bids are asked by Edw. B. Ellicott, Cy. Elec., 12 City Hall, until Aug. 19 for furnishing electric light line construction, according to specifications on file. Approximate quantities are as follows: 500 telegraph poles, 500 cross arms, 1,000 cross arm braces, 1,000 locust pins, 2,500 lag bolts, 1,000 washers, 4,000 pole steps, 4,000 triple petticoat glass insulators and 50 miles of No. 6 triple braid weatherproof electric light and wire.

WINFIELD, KAN.—The City Council awarded the contract for installing a $30,000 electric lighting plant to E. L. Overton of Topeka. Work will begin at once.

SPRING VALLEY, WIS.—The village board has adopted plans and specifications for a municipal electric lighting plant, to cost about $10,000, and to be completed this fall.

OSHKOSH, WIS.—W. H. Whitney, of Boston, Mass., has purchased the property of the Oshkosh Electric Light & Power Co., which has been in the hands of a receiver. The price paid was $215,000.

WINTHROP, MINN.—The Village Council will open bids Aug. 26 for the purchase of $7,000 5% water-works and electric light bonds. C. A. Schilling is Village Recorder.

HELENA, MONT.—The Gallatin Power Co. has incorporated with $150,000 cap. stock. The company will establish a power plant at Sheep Rock and divert water from West Gallatin River. The board of directors is composed of E. J. Carter, S. A. Mendenhall, Geo. Cox, E. W. King and Chas. S. Hartman, all of Bozeman.

JOPLIN, MO.—The citizens have voted to issue $30,000 bonds for the purpose of enlarging the city light plant.

SEARCY, ARK.—Owen Ford, Consult. Engr., 710 Security Bldg., St. Louis, Mo., writes us that bids will be asked about Sept. 15 for construction of a complete electric light plant to cost about $21,000. The plant will be installed by the Electric Light Improvement Board, Emmet Snipes, Secy.

LARAMIE, WYO.—It is reported that H. D. McCutcheon and J. D. Boyle, of Pittsburg, Pa., have been awarded a 10-year contract by this city, to light streets and public buildings.

McKINNEY, TEX.—The contract for the city electric light plant to be installed in connection with the water-works system will be let Aug. 31. Plans call for increasing the size of water-works pump station so as to include the light plant, the installation of an additional dynamo, nine miles of wire, 45 arc lights of 2,000 c. p. each, etc.

LOS ANGELES, CAL.—Bids are asked by H. J. Lelande, Cy. Clk., until Aug. 22 to light the city streets for one year, beginning Jan. 1, 1905, according to specifications on file.

REDDING, CAL.—The Redding Gold & Copper Co. intends to erect a power plant to furnish electricity for use in operating the mines.

BRIDGES.

SKOWHEGAN, ME.—The Boston Bridge Works, 47 Winter St., Boston, Mass., has received the contract for building a steel viaduct 600 ft. long and 112 ft. high, for the Somerset Traction Co.

BOSTON, MASS.—The following were the three lowest bids received Aug. 11 by James Donovan, Supt. Sts., for steel superstructure on the new Norfolk Ave. bridge: Eastern Bridge & Structural Co., Worcester, $11,900; L. F. Shoemaker & Co., Philadelphia, $11,991; Boston Bridge Co., City, $11,996. The bridge is to be a through truss bridge of one span, 111 ft. long and 53 ft. wide. It will have three main trusses and two roadways.

SALEM, MASS.—The construction of the Kernwood bridge between Salem and Beverly will be begun this fall. Fred. H. Eastman, Engr., 38 Exchange St., Lynn, is preparing final plans.

SHORT BEACH, CONN.—It is probable that the proposed draw or lift bridge over Farm River here will be built soon. Est. cost, $13,000. It will be built jointly by Branford and East Haven.

SPRINGFIELD, N. J.—The Union County Board of Freeholders has voted for the construction of a new iron and brick arch bridge on Springfield Ave., Springfield, to cost about $1,300. Freeholder P. H. Meisel, of Springfield, is Chn. of Com. in charge of work.

NUTLEY, N. J.—The Board of Freeholders has decided to construct an arch bridge at John St. in place of present structure, which was badly damaged by the flood last fall.

MOUNT HOLLY, N. J.—Bids are asked by Board of Chosen Freeholders of Burlington County, until Aug. 20 for the erection of a bridge on the Camden turnpike. Plans and specifications may be seen at office of Chas. E. Merritt, County Solicitor, 21 High St., City.

BROOKVILLE, PA.—Bids are asked by J. M. Shumaker, Supt. Pub. Grds. and Bldgs., Harrisburg, until Aug. 30 for rebuilding substructure and superstructure of bridge over Red Bank creek at Pickering St.

HARRISBURG, PA.—The Board Public Buildings and Grounds appointed engineers to prepare plans for construction by the state of bridges across the Catawissa Creek in Columbia County, to replace three destroyed by high water last winter.

NORRISTOWN, PA.—The Commissioners of Montgomery County will erect a new bridge across the Perkiomen, west of Pennsburg. It will be one of the largest spanning that stream.

SAFE HARBOR, PA.—Bids are asked by J. M. Shumaker until Aug. 30 for constructing a bridge over Conestoga creek.

GLENOLDEN, PA.—An ordinance granting permission to the Philadelphia, Baltimore & Washington Railroad Co. to erect a new bridge over the Chester pike at South Ave. for the accommodation of its four-track system, has passed the first reading. Jas. Buckelew of Wilmington, Del., is Princ. Asst. Engr.

DARBY, PA.—The County Commissioners, at Media, will shortly let the contract for a new iron bridge over Darby creek at Darby. This bridge will be wider than the present one, accommodating two trolley tracks.

COLUMBIA, LA.—At a meeting of the parish jury it was decided to construct an iron bridge across the Ouachita River at this point. Cost, $40,000.

NATCHEZ, MISS.—Bids are asked by John F. Jenkins, County Clk., until Sept. 5 for construction of five steel bridges.

KNOXVILLE, TENN.—The Board of Mayor and Aldermen passed an ordinance on the first reading requiring the Knoxville, La Follette & Jellico Railroad Co. and the Southern Ry. Co. to construct a bridge or viaduct over their railroad tracks where they cross Clinch Ave. West.

FREMONT, O.—Bids are asked by County Commissioners until Sept. 1 for construction of an arch bridge of stone or concrete in Green Creek Township. Plans and specifications at office of S. M. Fronizer, County Audr.

TOLEDO, O.—The Lake Shore Railroad will build a new bridge over its tracks at Fassett St. in the near future. It is likely that the American Bridge Co. will do the work. E. A. Handy, of Cleveland, is chief engineer.

CELINA, O.—Paul R. Murray, C. E., of New Philadelphia, has the plans and specifications for bridge to be built over the Wabash River here. Bids are asked until Sept. 3.

FRANKLIN, IND.—Bids are asked by Johnson County Commissioners until Aug. 27 for construction of bridges and repair of bridge floors as per plans on file in office of Oscar V. Nay, County Audr.

INDIANAPOLIS, IND.—The Board of County Commissioners awarded the contract for the new steel plate girder bridge over White River at Crow's Nest to the Newcastle Bridge Co. for $15,490.

INDIANAPOLIS, IND.—Bids are asked by Board Public Works until Sept. 5 for construction of a new stone abutment for bridge across canal at West St. and for constructing a new bridge over canal at Tenth St., and for lowering bridge at Holton Place.

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WABASH, IND.—Contract for building the viaduct over Charley Creek at Ferry St. was awarded by City Council to the Block Bridge & Culvert Co. of Indianapolis, at $9,555. The viaduct is 181 ft. long and 35 ft. wide and consists of four arches of 39 ft. each.

MARION, IND.—The Attica (Ind.) Bridge Co. was awarded the contract by County Commissioners for constructing the new McFeeley Bridge for $24,889.

INDIANAPOLIS, IND.—Bids are asked by County Commissioners until Sept. 3 for constructing a bridge over White River at West Michigan St. Plans and specifications on file in office of County Commissioners. Est. cost, 150,000.

CHICAGO, ILL.—Bids are asked by F. W. [illegible]ki, Comr. Pub. Wks., 222 City Hall, until Aug. 20, [illegible] the re-enforcement of superstructure of the 35th St. bridge. Plans and specifications on file in office of Department Public Works, 327 City Hall.

CHICAGO, ILL.—Bids are asked by the Board of Trustees of the Sanitary District of Chicago, 1110 Security Bldg., until Oct. 12 for erecting the superstructure of two bridges across the extension of the main drainage canal of the Sanitary District of Chicago. Zina R. Carter, Pres. (Advertised, Engineering News.)

MENDOTA, ILL.—Bids are asked by the City Clerk until Aug. 22 for constructing a concrete foot bridge [illegible] ft. long and 4 ft. wide.

DAVENPORT, IA.—The contract for the erection of the new steel bridge over the north branch of Rock River was let to the Clinton Bridge & Iron Co., at $14,765, and $[illegible].75 per cu. yd. for extra concrete work.

WATERLOO, IA.—Clinton Bridge & Iron Co. was awarded the contract for constructing Lincoln, Webster St., and Logan Ave. bridges at $3,489, $1,729 and $2,[illegible], respectively.

DULUTH, MINN.—A. Y. Bayne, of Minneapolis, was the lowest bidder, at $10,000, for constructing a steel bridge across Lester River.

ST. PAUL, MINN.—The Assembly has approved a resolution from the Board of Aldermen authorizing the City Engineer to expend $4,700 for construction of a new iron bridge at Payne Ave. and eBaumont St. The bridge will be constructed by day labor under the direction of the City Engineer.

ATCHISON, KAN.—A. D. Clark, City, was the lowest bidder, at $1,600, for construction of a steel bridge over Stranger creek, near Potter. The span of the bridge is 125 ft. and it is to rest on steel tubes, filled with concrete.

OMAHA, NEB.—Bids are asked by John C. Drexel, County Clk., until Aug. 31 for construction of a 200-ft. steel bridge on steel tubes across Elkhorn River. Plans and specifications on file in office County Surveyor.

DEVILS LAKE, N. DAK.—All bids received by County Commissioners for constructing 14 steel bridges were rejected. The Northwestern Iron Works bid of $6,616 was the lowest and $9,400 from the Twin City Bridge Co. was the highest.

MITCHELL, S. DAK.—Bids are asked by County Commissioners until Sept. 6 for construction of one steel bridge, 80 ft. long, 16 ft. roadway, and also constructing one 24-ft. pile bridge, 16 ft. roadway. O. D. Stearns, County Audr.

STEAMBOAT SPRINGS, COLO.—Bids were opened Aug. 9 in the office of State Engineer at Denver for the Yampa bridge, to cross Fifth St. at Steamboat Springs. The contract for the structure, which is to be a 100-ft. steel span, went to the Pueblo Bridge Co., at $3,100 for superstructure only. Bids were also opened for the Rio Blanco bridge, to cross Wolfe Creek, 45 miles west of Meeker, but were all rejected for the reason that they were above the appropriation. The appropriation amounts to $2,000.

DENVER, COLO.—All bids received July 23 for constructing a bridge over White River were rejected. L. G. Carpenter is State Engr.

PORTLAND, ORE.—The Pacific Const. Co., of Everett, who was awarded the contract for a steel bridge over Marquam gulch at Front St., has revoked the contract. The Pacific Coast Co., of San Francisco, is the next lowest bidder, at $58,315, and the contract may be awarded to them.

LOS ANGELES, CAL.—Bids are asked by H. J. Lelande, Cy. Clk., until Aug. 22 for construction of an overhead crossing at Lake Shore Ave. and Sunset Boulevard. Plans and specifications on file in office of City Engineer.

OAKLAND, CAL.—Plans for the proposed scenic boulevard from this city to Haywards, a distance of 9 miles, have been submitted to the Supervisors by County Surveyor E. C. Prather. Est. cost, $301,000. Bids will be received until Aug. 21. Numerous bridges and culverts are to be constructed, the largest bridge being a span of about 60 ft. across the San Lorenzo creek.

REDDING, CAL.—The Supervisors have instructed Deputy County Surveyor Nourse to prepare plans and specifications for the extension of the east approach to the Redding free bridge across the slough. Plans and specifications are to be submitted Sept. 5.

STOCKTON, CAL.—All bids on the Powder House Slough bridge were rejected. Surveyor Quail estimated the cost at $4,500, but the bids were from $1,000 to $1,500 higher.

MARTINEZ, CAL.—Bids are asked by J. E. Rodgers, County Clk., until Sept. 6 for construction of a bridge across Sycamore Creek. Specifications on file.

REDDING, CAL.—Bids are asked by W. O. Blodgett, County Clk., for construction of a stringer bridge across Stillwater, according to plans and specifications on file.

CASTLEDALE, UTAH.—The County Commissioners have decided to bridge Cottonwood Creek at Orangeville. Wm. McKenzie will draw plans and specifications for the proposed bridge and as soon as they are ready bids for construction will be advertised for. Cost, about $3,000.

BUILDINGS.

FORT WILLIAMS, ME.—Bids are asked by Constructing Quartermaster, 185 Middle St., Portland, Me., until Aug. 29, for construction, plumbing, heating and electric wiring of an exchange building at Fort Williams. Capt. A. W. Yates, Q. M.

CAMBRIDGE, MASS.—J. B. Byrne was lowest bidder for building Houghton school at $77,377. Higgins & Co. were lower bidders on plumbing contract at $3,597.

MARBLEHEAD, MASS.—Bids are asked by the Treasury Department, Washington, D. C., until September 16, for the construction (including plumbing, heating apparatus, electric wiring and conduits) of the post office here. James Knox Taylor, Supervising Arch.

FORT ANDREWS, MASS.—Bids are asked by Constructing Quartermaster, 170 Summer St., Boston, Mass., until Aug. 27, for the construction, and, where required, the plumbing, steam heating and electric wiring of the following buildings at Fort Andrews, Peddock's Island, Mass.: Of brick: one double set captains' quarters; one double set lieutenants' quarters; two double sets N. C. S. O. quarters; one single set N. C. S. O. quarters; one barrack; one guard house; one Q. M. stable, and one hospital. Of frame: one coal shed, one wagon shed, and one ordnance storehouse. Total, twelve buildings. Major John E. Baxter, Q. M., Room 410.

SPRINGFIELD, MASS.—Frank W. Wright, Frank W. [illegible] and John H. C. Church will erect a 3-story fireproof building that will contain two large halls. They will also build a modern ground floor theatre. Cost, [illegible]. Mac A. Vance, of Pittsfield, is Arch.

NEW HAVEN, CONN.—Foxen & Wright, Archs., Boston, Mass., are reported preparing plans for the national office building of the Knights of Columbus. Cost, $200,000.

NEW YORK, N. Y.—Bids are asked by John J. Pallas, Pres. Dept. Parks, Arsenal Bldg., Fifth Ave. and 64th St., until Sept. 22, for (contract No. 4) work and materials for erection and completion of the library stack work in the New York Public Library, Astor, Lenox and Tilden foundations, Fifth Ave., 40th and 42d Sts.

NEW YORK, N. Y.—Plans have been filed by D. Stone, Bible House, Arch., for a 6-story brick flat, 95 × 90 ft., at Madison Ave. and 97th St., for Mannados Realty Co., [illegible] Broadway. Cost, $180,000.

By G. F. Pelham, Arch., 503 Fifth Ave., for a 6-story brick flat, 50 × 90 ft., Norfolk and Rivington Sts., for I. [illegible], 120 Bible House. Cost, $54,000.

By Moore & Landsiedel, Archs., for six 6-story brick flats, 45 × 86 ft., on 152d and 151st Sts., west of Amsterdam Ave., for H. Raabe and another, 319 West 64th St. Cost, $300,000.

By Buchman & Fox, Archs., 11 East 59th St., for a 6-story brick factory, 50 × 92 ft., at 416-418 West 45th St., for Stern & Staalberg, 448 West 43d St. Cost, $50,000.

By Lynch & Orchard, 1 West 34th St., Archs., for a 4-story brick school, 100 × 106 ft., at Amsterdam Ave. and 97th St., for Holy Name Parish, 207 West 96th St. Cost, $125,000.

By A. E. Badt, 1 Union Sq., for three 6-story brick flats, 51 × 87 ft., and 44 × 87 ft., on 103d St., 100 ft. west and also 202 ft. west of Lexington Ave., for Greenstein & Mayer, 230 Grand St. Cost, $145,000.

By G. F. Pelham, Arch., for a 6-story brick flat and store, 44 × 72 ft., at Ninth Ave. and 50th St., for A. Silverson, 236 East 61st St. Cost, $52,000.

NEW YORK, N. Y.—The contractor for the concrete piling for the foundation of the building to be erected for the U. S. Express Co., at 555-7 West 23d St., New York, is the Raymond Concrete Pile Co., of Chicago, Ill. In our issue of Aug. 11 the contractor's name was given as the Raymond Concrete Power Co.

D'Oench & Yost, 289 Fourth Ave., will receive bids on the home for girls for the Sevilla Home for Children. Samuel Sloan, Jr., Pres., 22 William St., may be addressed. Brick, stone and concrete, structural iron, fireproofing, flat roof, electric wiring and steam heat. Cost, $112,000.

Franklin Haines will build a 12-story apartment house at Central Park West and 65th St. Cost, $750,000. The contract for the work has been awarded to the Thompson-Starrett Co.

Bids were received on Aug. 15 for the general construction of the Stuyvesant High School, 15th and 16th Sts., west of First Ave., as follows: Remington Construction Co., 135 Broadway, $669,000; P. Sullivan, 66th St. and Broadway, $637,000; R. E. Henningham, 4 Court St., Brooklyn, $634,450; P. J. Walsh, 503 Fifth Ave., $623,000; Thos. Cockerill, 147 Columbus Ave., $664,000; P. J. Carlin Co., 26 Court St., Brooklyn, $615,000. It is to be "H" shaped, five stories and basement, 210 × 200 ft., with a facade of ornamental limestone, and triple tiers of broad windows at the second, third and fourth stories. The basement and main story will be fitted as a two-story gymnasium and two-story auditorium. Cost, $550,000.

Bids were received on Aug. 15 for the general construction of new Public School 38, on Clark St., between Dominick and Broome Sts., as follows: Waters & O'Connell, 5 East 42d St., $314,896; P. Sullivan, 66th St. and Broadway, $313,000; R. E. Henningham, 4 Court St., Brooklyn, $319,873; P. J. Walsh, 503 Fifth Ave., $318,000; Thos. Cockerill, 147 Columbus Ave., $344,000; A. Nugent & Sons, 508 East 117th St., $316,000; P. J. Carlin & Co., 26 Court St., Brooklyn, $305,000; Wm. Werner, 892½ Forest Ave., $318,120.

BROOKLYN, N. Y.—Bids were received on Aug. 15 for the general construction of Erasmus Hall High School on Flatbush Ave, north of Grant St., as follows: Jno. Auer & Son, 957 Broadway, $273,760; P. J. Carlin & Co., 26 Court St., $290,000; Jno. Thatcher Sons, 54 Park Ave., $267,900; R. E. Henningham, 4 Court St., $269,981. All local contractors.

Thos. G. Carlin, 215 Montague St., City, has the contract for the 72d Precinct Police Station, at $84,000. It will be erected on Lawrence Ave., east of Third St.

The Trustees of the Masonic Guild of Brooklyn, comprising representatives of Masonic bodies of the second and third districts, will erect a Masonic Temple at Clermont and Lafayette Aves., next spring. Cost, about $250,000. Theodore A. Taylor, Pres.; Vice-Pres., George Freifeld; Treasurer, Charles A. Tonsor; Secy., Frank W. Robbins.

AUBURN, N. Y.—Frank B. Gilbreth, of New York and Boston, has been awarded the contract for a building for the Auburn Home Co. Brick, 422 × 80 ft.

CAMDEN, N. J.—Camden County Building Commission has received bids for installation of heating, ventilating and electric light plants in court house. Lowest bidders were J. F. Buchanan & Co., $48,480. Bids were previously received on this work, and the contract was awarded to Keller, Pike & Co. at $52,000. The award of the contract was contested by Harris & Alger, who were the lowest bidders, and work was readvertised.

NEW YORK, N. Y.—Plans have been filed for Rockefeller Institute for Medical Research building, to be erected on site bounded by East River, Ave. A, 64th and 67th Sts. There will be three buildings, one main and two auxiliary buildings. Cost, $325,000.

PHILADELPHIA, PA.—Revised bids are asked until Aug. 24 by Brockie & Hastings, Archs., 328 Chestnut St., for an addition to the Rush Hospital for Consumptives, at 33d St. and Lancaster Ave. Brick, stone and steel, fireproof, five stories.

PITTSBURG, PA.—A. & S. Wilson Co., City, were awarded contract for erection of building for the Pittsburg Gazette, on Oliver Ave. Cost, $100,000.

W. P. Fraser, City, has plans for an apartment house, 60 × 180 ft., at North Ave. and Palo Alto St., Allegheny Height. Cost, $100,000.

Stevenson & Adams, City, were awarded contract for construction of 14 dwelling houses on Greenfield Ave., for E. M. O'Neill. Cost, $28,000. Mr. O'Neill will erect 86 additional houses of the same type in the near future.

C. H. Korns, City, has plans for a 4-story apartment house, 142 × 128 ft., on Kelly St. Cost, $80,000. Architect is R. D. Milligan, Wilkinsburg Station, City.

G. G. Wible, Wilkinsburg Station, City, will build a 4-story apartment house, 100 × 125 ft., on Penn Ave., Wilkinsburg. Cost, $65,000.

SKYES, PA.—Chas. P. Powers, Pittsburg, was awarded contract by Cascade Coal & Coke Co., of Dubois, Pa., for erection of 320 dwelling houses here.

McKEESPORT, PA.—The R. F. Dulaney Commission Co. will erect business block at Thorn St. and Blackberry Alley. Cost, $65,000.

D. G. Donovan and R. W. Ekin, of the United Real Estate Co. will erect theater and business block on Walnut St., to cost $50,000.

MARION, PA.—A 2-story stone chapel will be erected by the Misericordia Convent here. Cost, $100,000. Edwin F. Durang, 1200 Chestnut St., Philadelphia, is Arch.

MT. PLEASANT, PA.—Mt. Pleasant Institute will erect a boys' building to cost $60,000. H. C. Dixon, Principal, is in charge of project.

PITTSBURG, PA.—The First Congregational Church will erect new building on Dithridge St., to cost $75,000. Rev. B. Gwernydd Newton, Fifth Ave. and Washington St., City, is pastor.

The Hill Top Land & Improvement Co., City, will erect 100 dwelling houses to cost $2,000 each, in Montooth borough and other suburban districts. Dwellings will be of Portland cement blocks, 5 rooms each, with baths.

DUQUESNE, PA.—F. C. Shallenberger, Empire building, McKeesport, Pa., was awarded contract for erection of Holy Trinity Slavonic Church. Cost, $75,000.

BALTIMORE, MD.—It is reported that Sperry, York & Sawyer, Builders' Exchange, have been commissioned to prepare plans for the new building of the Consolidated Gas Co., at Lexington and Liberty Sts. The structure will be five stories, fireproof, of steel, stone and brick, steam heat, elevators, electric light, tiling, etc. Cost, $100,000.

Baldwin & Pennington, 429 North Charles St., have been commissioned to prepare plans for the German Bank of Baltimore, building one story, 60 × 120 ft., at Baltimore and Holliday Sts. Stone, concrete, brick and iron, fireproof, steam heat, electric light. Cost, $100,000.

Parker & Thomas have plans for the new building of the Savings Bank of Baltimore, at Baltimore and Charles Sts. One story, stone, brick and steel. Cost, $100,000.

The Baltimore & Ohio Ry. Co., offices at Camden Station, will erect a large extension to its terminal warehouse, this location. Eight stories, 50 × 416 ft., brick, stone and iron, steam heat, elevators, skylights, electric light, tiling, concrete, etc. Cost, $250,000. The present terminal warehouse is about 700 ft. long, running from Camden to Barre Sts. It is reported that bids for this work have been received.

John J. Walsh & Sons, 1525 Maryland Ave., have been awarded the contract at $250,000 for the Chamber of Commerce building, to be erected on Holliday and Water Sts. and Postoffice Ave. Charles E. Cassell & Son, Archs., 411 North Charles St. Four stories, with basement, 85 × 186 ft.; brick with granite base and terra-cotta trimmings, cornice and coping, present foundation; steel frame fireproof construction; cast-iron columns; slag roofing; reinforced concrete floors; steel and iron stairways with slate treads; skylights; pavement lights; metal frames and sashes; wireglass; asbestolith flooring. Elevators, plumbing, heating, electric wiring, gas piping, marble work, glass and sidewalk paving reported not included in contract.

ANNAPOLIS, MD.—Contract for the concrete piling for the new marine and engineering shop building at the U. S. Naval Academy has been awarded to Raymond Concrete Pile Co., Chicago.

RALEIGH, N. C.—W. C. Bain, of Greensboro, N. C., has been awarded the contract to erect agricultural building at A. and M. College. Cost, $41,000.

PENSACOLA, FLA.—De Leon & Lopez, of Atlanta, Ga., have been awarded the contract for the construction of the Bureau of Equipment building at the navy yards. Cost, $116,000.

NATCHITOCHES, LA.—Bids are asked by P. E. Prudehomme, Pres. Police Jury, until Aug. 29 for the erection of jail building. Wm. S. Hull, Arch., Jackson, Miss.

ABERDEEN, MISS.—Bids are asked by Board of Supervisors of Monroe County until Sept. 5 for the erection of jail. Charles P. Smith, Clk. Andrew J. Bryan, Arch., 905 Hennen Bldg., New Orleans, La.

MERIDIAN, MISS.—The Meridian Terminal Co., recently incorporated, will erect a union depot in this city, it is reported. Cost, $250,000. C. C. Harvey, Pres. of the New Orleans & Northern Ry., is interested.

CHATTANOOGA, TENN.—Bids are asked until Aug. 31 for laying cement floors in 24 buildings at Chickamauga Park, Ga. Capt. H. W. French, Q. M. (Advertised, Engineering News.)

ZANESVILLE, O.—Bids are asked by James Knox Taylor, Supervis. Arch., Treas. Dept., Washington, D. C., until Sept. 12 for the construction of the U. S. Post Office. (Advertised, Engineering News.)

WARREN, O.—Bids are asked until Aug. 27 for the heating of the Masonic Temple. Henry & Son, Archs. W. A. Spill, Secy., 29½ Market St., City.

MARIETTA, O.—The contract for the concrete foundation piling for the new wholesale grocery building for the Eldridge-Higgins Co. has been awarded to the Raymond Concrete Pile Co., Chicago. Richards, McCarty & Bulford, Columbus, O., are the Archs.

DETROIT, MICH.—Bids are asked until Aug. 30 for constructing, plumbing, heating and electric wiring brick administration building, guard-house, and non-commissioned officers' quarters at Fort Wayne, Mich. Capt. P. Whitworth, Q. M.

EDWARDSVILLE, ILL.—Bids are asked until Sept. 1 for steel cells, structural iron work and plumbing for an addition to county jail. Pauly & Son, Archs., Granite City, Ill. Edward Feutz, County Clk.

PEORIA, ILL.—Bids were received by John S. Stevens and O. J. Bailey on Aug 10 for construction of a building for John C. Proctor Home for Old People at Spring Hill Park. Fred Meintz, City, was awarded the contract at $194,000. Total cost of building will be $250,000.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

PEORIA, ILL.—Frank Hasbrouck was awarded contract for building new Dime Savings Bank. Cost, $100,000.

CHICAGO, ILL.—Richard Schmidt has prepared plans for the new building to be erected by Chapin & Gore at 16-22 Adams St. Eight stories, 80 × 80 ft., of fireproof construction. The interior is to be extensively trimmed in hard woods. Cost, $100,000.

D. H. Burnham & Co., Railway Exchange Bldg., again are reported to be receiving bids on alterations to the Union League clubhouse at Jackson Boulevard and Custom House Court. Cost, $250,000. Bids are said to be asked for building an 8-sty. 50 × 150 ft. addition to clubhouse.

Frost & Granger, 184 La Salle St., have been commissioned to prepare plans for the Northern Trust Co. bank and office building, to be erected at La Salle and Monroe Sts. Twelve stories, fireproof and steel construction. Cost, about $1,000,000. The building on the present site will be wrecked on May 1, when work probably will be started.

Jenney & Mundie, Archs., New York Life Bldg., are reported to be preparing plans for a 4-story top addition, 79 × 90 ft., to the 12-story Fort Dearborn office building at Monroe and Clark Sts., and a 16-story extension, 30 × 90 ft., to same, facing Monroe St., for the Fort Dearborn Safety Vault & Building Co. Fireproof, steel skeleton construction, brick and terra-cotta fronts, composition roof, steam heat, electric light. Cost, about $300,000. Contracts are to be let in four or five weeks.

WEST AURORA, ILL.—$63,000 bonds have been voted for a new high school building.

AMES, IA.—Bids are asked by the Board of Trustees of the Iowa State College until Sept. 7 for the heating and ventilating apparatus and plumbing for the Central Building. Proudfoot & Bird, Archs., 712 Crocker Bldg., Des Moines. (Advertised, Engineering News.)

MOUNT VERNON, IA.—Bartlett & Kling, of Grand Rapids, Ia., inform us that they were awarded contract for construction of a $50,000 Carnegie library here.

MINNEAPOLIS, MINN.—National Guard companies in this city plan to erect a $150,000 armory.

MANITOWOC, WIS.—Sketches will be received in competition up to Oct. 1 for a court-house, to cost not more than $150,000 complete, with plumbing, heating and lighting. Chas. Krause, Chn. Com., Two Rivers, Wis. C. A. Groffman, Secy., City.

MINOT, N. DAK.—Bids are asked by Louis A. Larson, County Audr., until Aug. 29 (readvertisement, former bids having been rejected) for addition and improvements to the court-house. W. C. Albrant, Arch., Fargo.

FT. LEAVENWORTH, KAN.—Bids are asked until Aug. 20 for constructing two additions to the post hospital, including plumbing, hot water heating, gas piping and electric wiring. Major D. E. McCarthy, Q.-M.

SHERIDAN, WYO.—Ferguson & Pearson have been awarded contract for the county court-house, at $44,742.

FORT ASSINNIBOINE, MONT.—J. B. McDonald, Q.-M., writes that bids are asked until about Sept. 15th for the construction of a brick guard-house, brick N. C. S. O. quarters, brick stable for field staff and band, three double brick cavalry stable guard buildings, and one 800-ton frame coal shed; the first named to have steam heat and the first two to have plumbing.

SEATTLE, WASH.—Plans for the superstructure of the new Union Depot have been filed. Cost, $425,000. A permit for the $65,000 foundation has been issued.

SAN FRANCISCO, CAL.—The Schroth Co. will erect an apartment hotel on Geary St. Cost, $325,000. W. H. Armitage and W. J. Cuthbertson are the Archs.

EUREKA, CAL.—The Wilson-Lyon Construction Co., of San Francisco, was awarded the contract for the construction of the new municipal building, at $71,216.

MOOSE JAW, ASSA., N. W. T.—Bids are asked by John D. Simpson, Secy.-Treas., until Aug 31 (postponement) for the construction of a city hall. W. C. Albrant, Arch., Fargo, N. Dak.

WATER SUPPLY AND IRRIGATION.

ORONO, ME.—C. S. Taylor, Wellesley, Mass., is stated to have secured contract for installing water-works for this place.

AGAWAM, MASS.—Committee, Amos Goselin, Member, is to consider need of water supply for town.

AMESBURY, MASS.—Committee has reported favoring purchase by town of plant of Powow Hill Water Co., and special town meeting will be held soon to consider matter.

CHICOPEE, MASS.—Aldermen have passed order to have city engineer make preliminary survey looking to securing water supply from Willimansett Brook.

BROCKTON, MASS.—Water Commissioners are stated to be calling for bids until Aug. 26 for new stand-pipe to be erected for city. Bids are asked on a steel construction and on concrete and steel as well. Chas. R. Felton, Cy. Engr., prepared the specifications, which call for a pipe 75 ft. in diameter and 35 ft. high with capacity of 1,100,000 gallons.

SPRINGFIELD, MASS.—Ordinance was to come before Council Aug. 8 to authorize Water Commissioners, C. L. Goodhue, Chn., to construct a single filtration plant at Ludlow for Ludlow water, est. cost of which has been set at $300,000.

EAST GREENWICH, R. I.—East Greenwich Fire District has voted that it should own its own water supply system. Committee, H. R. Nightingale, Member, is investigating matter and is to report Dec. 5.

WOONSOCKET, R. I.—Committee is to confer with water board regarding proposed appropriation of $45,000 for new pumping facilities at the pumping station, and also regarding establishment of filtration plant and an additional storage tank. Edmund Kent is Supt. W.-W.

SOUTH NORWALK, CONN.—City votes to spend $60,000 for building filtration plant. Stephen S. Hatch is Water Comr.

GROTON, CONN.—Borough has voted to purchase local water-works and electric light plants for $105,000 and $20,000, respectively.

SCHOHARIE, N. Y.—Village was to vote Aug. 15 on establishing water-works.

GOSHEN, N. Y.—Notice is hereby given that the tenders for proposals to excavate a portion of the reservoir, advertised in Engineering News, Aug. 11, is recalled, as by reason of recent rains the work cannot be done. V. K. Mills, C. E. H. J. Yerk, Clk. (Advertised, Engineering News.)

NEW YORK, N. Y.—Bids are asked by John T. Oakley, Comr. Water Supply, Gas and Electricity, 19 Park Row, until Aug. 31 for following work in connection with the establishment of high-pressure pumping station, salt water auxiliary fire system and complete set of high pressure salt water mains: (1) Furnishing, constructing and erecting triplex pumps and gas engines, with all appliances complete for high pressure fire service, at the Coney

Island sewage disposal plant, Neptune Ave. and West 12th St., Borough of Brooklyn. (2) Furnishing, constructing and erecting an engine house for high-pressure fire service at the Coney Island sewage disposal plant, Neptune Ave. and West 12th Sts. (3) Furnishing, delivering and laying high-pressure fire service mains, and appurtenances in West 10th and West 12th Sts, Neptune and Surf Aves., Kensington, Stratton's, Henderson's, Thompson's and New Iron Pier Walks, and at the Coney Island sewage pumping station.

Bids are asked by John T. Oakley, Comr., Water Supply, Gas and Electricity, until Aug. 24 for furnishing and delivering gate valves and hydrants. Bids are also asked for hauling and setting two 36-in. gate valves, and for making connection on 12-in. water main.

ALTOONA, PA.—Municipal water system is stated to have been much damaged by electrolysis.

LANCASTER, PA.—Council has adopted an ordinance authorizing a contract with the Pennsylvania Maignen Filtration Co., Philadelphia, Pa., for the erection of a city filtration plant. The city is to pay so much per 1,000 gallons for all water used, the minimum to be 5,000,000 gallons every 24 hours. It is stated that the local Board of Trade will carry the matter to the courts.

PHILADELPHIA, PA.—Following bids were received by Peter E. Costello, Dir. Pub. Works., Aug 10, for furnishing (1) sand washers, and (2) ejector pipes for the Torresdale filters: Charles E. Monday & Co., (1) $27,927, (2) $28,582; Q. R. Morris & Co., (1) $33,150, (2) $49,950; P. Gormley, (1) $16,190, (2) $25,750; E. M. Nichols, (1) $13,095, (2) $20,915; Owen J. Evers (1) $23,780, (2) $30,915.15; David R. Burns, (1) $29,061.50, (2) $29,061.50. Contract for both (1) and (2) was awarded to E. M. Nichols.

DUQUESNE, PA.—Bids are asked by the Water Committee until Sept. 2 for sinking a wet well in the rear of Duquesne Borough pump house, said well to be sunk by means of a perforated iron shoe, with brick masonry built on top of same, and to be carried down to the rock a distance of 70 ft. Rankin & Hengst, Engrs., 301 Smithfield St., Pittsburg. (Advertised, Engineering News.)

SLIPPERY ROCK, PA.—J. M. Baird writes that this place has voted in favor of water-works.

WILMINGTON, DEL.—It is expected that plans and specifications for proposed new water system to be installed at a cost of $1,000,000 will be completed in about a month. Theodore A. Leisen is Ch. Engr., Water Dept.

CUMBERLAND, MD.—Local reports state that the National Highway Improvement Co. will shortly commence the erection of a 100,000 gallon reservoir on the mountain above the George's Creek Railroad. Mountain springs are to be tapped and water furnished to people in the valley below.

WILLIAMSPORT, MD.—Town Council has refused to grant franchise to local capitalists for installing water-works.

EMPORIA, VA.—We are informed that this town will sell $30,000 of water and sewer bonds, and that plans and specifications for the work will be ready some time next month. Chas. S. York, 1526 E. Biddle St., Baltimore, Md., is Des. Engr.

NORFOLK, VA.—Council has voted to grant application of Chesterfield Heights Co. to secure water supply from this city. Company proposes, it is stated, to expend $12,500 in laying water mains. H. L. Smith is Supt. City W.-W.

GRAHAM, N. C.—Southern Service Corporation, Washington, D. C., will, it is stated, install water-works and electric light plant in this town.

COLUMBIA, S. C.—A committee of three engineers have been selected to settle the water question of this city. The committee is made up of Prof. William P. Mason, Troy, N. Y.; Allen Hazen, 220 Broadway, New York, and George G. Earle, City Engineer, of New Orleans, La.

WARRENVILLE, GA.—Warren Mfg. Co., is stated to have let contract for constructing water-works at this place to Hallihan & Costello, Augusta, Ga., for $10,000.

CORDELLE, GA.—John E. Cole, Wenona, Ga., is stated to have secured contract for sinking artesian well for this city.

MIAMI, FLA.—Florida East Coast Hotel System will, it is stated, enlarge its water-works plant.

JACKSONVILLE, FLA.—Board of Bond Trustees have requested R. N. Ellis, Supt. W.-W. to submit estimate of what will be necessary in the way of enlargement and extension of the water-works, sewer system and electric lighting system to meet the demands of the city for ten years in the future.

PELL CITY, ALA.—City works agitated.

MOBILE, ALA.—Proposition is to come before council to appropriate $125,000 for construction of a pipe line from Eight Mile Creek to the city pumphouse.

LUMBERTON, MISS.—Council will sell $25,000 of bonds for putting in water-works.

CORINTH, MISS.—Plans and specifications for water-works and sewer system to be built in this city, bids for which are called until Aug. 30, as advertised in Engineering News, are on file at office of above publication, 220 Broadway, New York.

MACON, MISS.—City has rejected all bids received July 27 for constructing water-works. F. H. Beaman, at $33,208, was low bidder. H. L. J. Barnes is Cy. Clk.

PORTAGE LA PRAIRIE, MAN.—Bids are asked until Sept. 7 for certain materials for laying about 40,000 ft. of water mains and 36,000 ft. of tile sewers. Edw. Brown, Mayor. F. A. Whitaker, Secy. and Treas. Willis Chipman, Ch. Engr., 103 Bay St., Toronto, Ont. (Advertised, Engineering News.)

NEW ORLEANS, LA.—Plans and specifications are under way for pumping machinery to be used at the several pumping stations, and it is expected to be able to open bids for the equipment in November. It is estimated that the Sewerage and Water Board, George Earl, Supt., will spend about $500,000 for this machinery.

JEANERETTE, LA.—City has let contract for 150 ft. high steel tower and 100,000 gallon tank to Daniel Jeffrey, proprietor of Jeanerette Boiler Works. Contract for drilling artesian well not less than 600 ft. deep was let to A. D. Morresi Sons Deep Well Co., Ltd.

COLUMBUS, O.—Bids were received Aug. 10 for constructing cast iron water main from city to sewage disposal plant, est. cost being set at $118,000. James Westover at $116,279 was low bidder, and Charles T. McCracken & Co., Cleveland, O.; at $118,800 was next lowest.

CINCINNATI, O.—Bids are asked by Board Trustees, Commissioners of water-works until Sept. 9 for completing the construction of settling reservoirs and the laying of pump mains, and miscellaneous work in connection therewith, near the Village of California. The work includes all grading, masonry, concrete, asphalt and brick revetment, and inlets and outlets required for the formation of the reservoirs propor; the construction of about 12,500 lin. ft. of macadamized roadway; 800 lin. ft. of sewer pipe drains; laying of about 5,280 lin. ft. of 5-ft. and 6-ft. pipes and of about 10,830 lin. ft. of smaller pipes with all necessary valves and appurtenances. Charles G. Roth, Clk. (Advertised, Engineering News.)

Resolution has been before Water-works Commissioners providing for erection of new pumping station south of Fairmount.

DAYTON, O.—Chas. E. Rowe, Supt. W.-W., has submitted three plans to Board Public Service, for relieving low pressure in various parts of city. One of these provides for erection of stand-pipe, with supply from gasoline pump; the second embraces plan to install new high pressure pump, and the third plan calls for erection of another pumping plant.

CLEVELAND, O.—Local reports state that Village of Cleveland Heights will hold election Aug. 23 to vote on $50,000 bond issue for establishing water-works.

COSHOCTON, O.—Bids are asked by Board Public Service until Sept. 1 for furnishing and laying about 450 lin. ft. 20-in. cast-iron suction line from the present pump well on the point between the Walhonding and Tuscarawas Rivers to and across the Tuscarawas River and to the pump house. Chapin & Knowles, Canton, O., Engrs.

GLENVILLE, O.—Bids are asked by Board Public Service until Aug. 22 for laying water pipe in Brighton Road, between Doan St. and Lake Shore Boulevard. C. C. Collacott, Pres.

EVANSVILLE, IND.—Contract for repairing broken intake at city water-works has been let to Western Submarine Engineering & Construction Co., Chicago, Ill., for $27,950.

CHARLOTTE, MICH.—Water Board, according to reports, is to put in a settling well.

SHELBY, MICH.—We are informed that matter of bonding for water-works failed to carry at recent election and so nothing further is to be done at present. L. B. Plummer is Village Pres.

ABBOTSFORD, WIS.—City votes to issue $13,000 of bonds for constructing water-works.

POYNETTE, WIS.—Village may issue $10,000 of bonds for installing water-works.

GREEN BAY, WIS.—Green Bay Water Co. has asked for 30-year extension of its franchise, in return agreeing to put in a separate system of mains throughout the city for fire protection purposes.

WAUKESHA, WIS.—Waukesha Water-Works Co. is stated to have made offer to furnish city with water for 50-year period, agreeing among other things to rent 200 fire hydrants to city for $30 per year for each.

ELDRIDGE, IA.—Contract for installing a water-works system for this town was awarded on [illegible] 8 to the Des Moines Bridge & Iron Co., Des Moines, Ia., for $7,660.

ALBIA, IA.—Albia Water Co. has been incorporated in Iowa with $70,000 capital. Headquarters of company are at Tahlequah, Ind. Ter. Franchise for works here has been granted C. R. Reese, who is interested in above company, and preliminary surveys were stated to be under way some time ago, with prospect that contracts for pumps, etc., would be let early in September.

CLUTIER, IA.—Water-works to be established here, according to reports.

HAWKEYE, IA.—Bids are asked until Sept. 5 for construction of water-works for this town. M. Tschirigi, Dubuque, Ia., Engr.; Guy E. Green, Town Clk.

PERHAM, MINN.—Village votes not to issue $10,000 additional bonds for extension of water-works.

TWIN VALLEY, MINN.—Bids are asked until Aug. 26 for constructing water-works, to include furnishing and laying about 45 tons of cast-iron pipes, specials and hydrants, gasoline engine and pump; also steel tower and tank and brick pumping station. J. J. Flather, Engr., Minneapolis, Minn.; Alfr. Andersen, Village Recdr.

IOLA, KAN.—Bids are asked until Aug. 24 for construction of brick and concrete settling basin at the city water-works. It will be 264 ft. long, 100 ft. wide and 12 ft. in depth. The work to be done consists of excavation in earth, concrete and brick construction, back filling around walls, furnishing and placing suction and discharge pipes in connection with existing sewer. Lute P. Stover, Cy. Engr.; Elmer Remsburg, Cy. Clk.

KENNARD, NEB.—Water-works agitated.

VERMILLION, S. DAK.—Council may call election to vote on matter of taking over local water-works and electric light plant.

GREAT FALLS, MONT.—Plans, specifications and bidding sheets for construction of a steel storage stand pipe, 40 ft in diameter and 60 ft. in height, are on file at Engineering News office. Bids are advertised for until Sept. 5 in Engineering News.

COLUMBIA, MO.—Formal transfer to the city of the water-works and electric light plants of the Columbia Water & Light Co. has been made. The purchase price was $67,000. A $100,000 bond issue was recently voted, the surplus remaining to be used for boring deep wells. H. H. Tandy is Member Bd. Pub. Wks.

RUSSELLVILLE, ARK.—Water-works discussed.

GALVESTON, TEX.—Contract for building new pumping station for city water-works was let to Bowden & Worth, Galveston, for $13,500.

CORSICANA, TEX.—Council Water Committee is to report on purchase of plant of Corsicana Water Co., comparing cost with probable expense of erecting new plant by city.

PORTALES, N. MEX.—Election was held by Roosevelt County, Aug. 2, to vote on $6,600 bond issue for sinking artesian wells.

COLFAX, WASH.—Local press reports state that Council Water Committee has offered $10,000 to the person who will furnish Colfax an artesian flow of water within a radius of twelve miles of the city that will flow into the present reservoir by gravity 600,000 gallons of water every 24 hours.

VALE, ORE.—It is stated that the Malheur Water Users Association, capitalized at $2,700,000, with headquarters at Vale, will put through an irrigation scheme in Malheur County. The sum of $10,000 per year will be expended on improvements. Water power will also be harnessed and electric power developed on a large scale. Those interested are Emery Cole, Fred. Gellerman, N. C. Long, T. S. Smith, and others.

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TILLAMOOK, ORE.—City may purchase local water-works.

CHICO, CAL.—Reports state that F. C. Lusk of the Chico Water Co. has decided to establish a new water plant east of Chico, providing a sufficient supply can be obtained. A greater pumping capacity must be had before next summer.

FULLERTON, CAL.—It is announced that Adams-Phillips Co., Los Angeles, Cal., who own the local water-works, wants to sell to private individuals or to the city for about $15,000. Unless sale is made soon, extensive improvements will be made.

RIVERSIDE, CAL.—The South Mountain Water Co. has voted to issue bonds for $40,000 for retiring an outstanding indebtedness, purchasing additional lands and laying more pipe.

SANTA MONICA, CAL.—Election was to be held Aug. 16 to vote on bond issue for about $250,000, $150,000 of which is either for acquiring present water-works or for developing new system.

VENTURA, CAL.—G. W. Chrissman is said to be seeking artesian well supply of water, with intention of putting in water-works.

City is to hold an election soon to vote on bond issue to acquire a water and light system.

WATSONVILLE, CAL.—City Engineer is to prospect for water with intention of establishing municipal water-works.

SANTA ROSA, CAL.—Following improvements to city water-works have been recommended to council: Pump and setting, $21,500; 2 boilers and setting, $7,500; 300 tons of 12-in. pipe at $35 per ton, $10,500; 160 tons of 14-in. pipe at $35 per ton, $5,600; laying pipe, $15,000; total, $60,100.

VALLEJO, CAL.—Board Public Works has recommended resolution that a 14-in. pipe be laid from Creston up to Green Valley, as an extension of the water supply system. City Engineer Kaarsburg has estimated cost of pipe line at $106,492.

SAUSALITO, CAL.—Mass meeting has been held to discuss a proposition to bond town for $30,000 for installing a better system for protection against fire. It is proposed to pump salt water into large tanks situated at different points on the hills.

TROY, IDAHO.—Works are to be installed here at a cost of $5,000. Pumping plant will be put in.

JULIAETTA, IDAHO.—Gravity water-works are to be installed her at a cost of $5,000.

NEZ PERCE, IDAHO.—Local reports state that the Nez Perce Water & Power Co., capitalized at $100,000, will take over the water-works system at this place. The water plant will be installed immediately. The owners have secured the springs on the Indian lands, 5 miles southwest of the town, which will be the source of supply for the plant. Z. A. Johnson, Stephen Johnson, C. W. Lewis and others are interested.

MYRTLE POINT, QUE.—Bids are asked by S. D. Pulford, Recdr., until Aug. 22 for furnishing material and constructing water system.

SEWERAGE.

SALEM, MASS.—Estimates have been received by Sewerage Commission for installing a steam pumping plant when disposal system is completed. Cost of three pumps would be $54,000; four 75-HP. boilers, each $6,000; power house, chimney, etc., $21,000; total, $81,000. Cost of running the plant is placed at $13,570 a year.

WESTFIELD, MASS.—Bids are asked by the Committee on Surface Sewerage until Aug. 24 for building about 1,700 ft. of 1 to 3-ft. brick and 3,620 ft. of 8 to 24-in. pipe sewer. Richard J. Morrissey, Chn.; Jas. H. Clark, Secy.; Oren E. Parks, Town Engr. (Advertised, Engineering News.)

BRIDGEPORT, CONN.—Bids are asked by the Board of Public Works until Aug. 31 for the construction of about 1,600 ft. of 4-ft. brick sewer in Huntington Road and William St. Patrick Kennelly, Dir.; H. G. Scofield, Cy. Surveyor, 167 State St. (Advertised, Engineering News.)

NEW CANAAN, CONN.—Irving Benedict, Warden, writes us that Borough has been authorized to bond for $30,000, and they will want about 3½ miles of sewers with filter beds and septic tank. Proposals will be called in about one week.

HOOSICK FALLS, N. Y.—J. H. Emigh, C. E., of North Adams, Mass., has made preliminary survey for a sewer system. Repairs would cost $2,000 and a new system $3,500, it is estimated.

BINGHAMTON, N. Y.—Plans for the Fourth Ward trunk sewer will be prepared by Rudolph Hering, of New York. Proposition to combine with Lestershire in building a sewer through that village is not considered feasible, it is said.

GLOVERSVILLE, N. Y.—Albert M. Banker was lowest bidder for constructing trunk sewer that will be built in connection with the sewage disposal plant. His bid was $135,000.

CORNING, N. Y.—Eveline & Baltimore, of Troy, have been awarded the contract for the construction of a section of the storm water sewers at about $25,000. E. R. Cary, of Troy, is Consulting Engr. for the Sewer Commission.

NEW YORK, N. Y.—Bids are asked until Aug. 24 for building various city sewers. John F. Ahearn, Boro. Pres.

BROOKLYN, N. Y.—Bids are asked until Aug. 24 for constructing various sewers in this borough. Martin W. Littleton, Boro. Pres.

LONG ISLAND CITY, L. I.—Queens Borough Construction Co. was awarded contract for building 12-in. sewer in Third St., at $6,268, and also for another sewer in Third St., at $14,728.

DANSVILLE, N. Y.—Specifications, bidding sheet, etc., for proposed sewer system here are on file at office of Engineering News. Bids are advertised for in Engineering News until Aug. 31. Knight & Hopkins, Rome, N. Y., are Engrs. B. G. Foss, Village Atty.

TRENTON, N. J.—Vivian M. Lewis, City Counsel of Paterson, has secured from the Court of Errors and Appeals a writ of error in the matter of the Passaic Valley trunk sewer, which has been opposed by that city. By act of the legislature of March 27, 1902, the Passaic Valley sewerage district was created and the supplemental act of April 22, 1903, empowered the commission to issue bonds for the prosecution of the work. Estimated cost is $9,000,000. On July 24 the New Jersey Supreme Court declared the act constitutional.

HOBOKEN, N. J.—Bids are asked until Aug. 24 for the construction of a brick sewer in Madison St. Jas. H. Londrigan, Cy. Clk.

SOUTH WILLIAMSPORT, PA.—Cost of proposed storm sewer near Shemp's lane is estimated by Engineer Fisher at $8,320 for a 4-ft. brick sewer; 3-ft. 2-in. brick sewer, $6,136; 4-ft. concrete, over $4,000. A 1,500-ft. concrete sewer probably will be selected at cost of $6.000.

BEAVER FALLS, PA.—Bids are asked until Aug. 20 for building several sewers. Harry T. Barker, Cy. Engr. W. S. Cook may be addressed.

SOUTH SHARON, PA.—South Sharon Lumber Co. has been awarded the contract for Spearman Ave. sewer, at $58,494, and for a conduit at $2,761.

MT. PLEASANT, PA.—S. C. Stevenson, Secy. of Council, 726 Main St., will receive bids for constructing 3,100 ft. of 8-in. and 1,050 ft. of 12-in. sewers; also for 700 sq. yds. of brick paving.

WASHINGTON, D. C.—Bids are asked until Aug. 29 for constructing a portion of the sewage disposal system outfall sewer. Henry B. F. Macfarland, Henry L. West, Chester Harding (Acting), Comrs.

BALTIMORE, MD.—Burnt District Commission has announced that $2,115,797 will be available for new sewer system.

ROANOKE, VA.—J. H. Wingate, Cy. Engr., writes that the Roanoke Construction Co., City, was awarded the contract for Campbell Ave. drain, at $19,894. Ten bidders.

GRIFFIN, GA.—Nesbitt Wingfield, C. E., of Augusta, has been commissioned to prepare plans for proposed sewer system; $100,000 bonds will be issued, it is reported.

GREENVILLE, S. C.—Bids will be asked for building Washington St. sewer. Maximum cost, $3,500.

CLEVELAND, O.—Bids are asked until Aug. 31 for building sewers in Newburg Township. Wm. H. Evers, C. E., County Surveyor; Julius C. Dorn, Clk.

ZANESVILLE, O.—Bids are asked until Sept. 1 for building several sewers in sewer system No. 4. H. W. Snoots, Secy.

COLUMBUS, O.—Bids were received on Aug. 10, as advertised for in Engineering News, for erecting a pumping plant for main sewage pumping station. Lowest bid is said to have been submitted by Samuel Esswein, City, at $46,500. Engineer's estimate was $52,000.

DELPHOS, O.—Bids are asked until Sept. 8 for constructing a sewer system here. G. L. McKibben, C. E., Van Wert, O. Work consists of 1,750 lin. ft. 4-ft. brick sewer; 1,340 lin. ft. 36-in. pipe; 360 lin. ft. 33-in.; 3,555 lin. ft. 30-in.; 400 lin. ft. 24-in.; receiving basin; seven manholes. J. W. Fisher, Clk.

CUYAHOGA FALLS, O.—Council has passed resolution to construct a sewer system. Cost, $80,000. Special election will be held on Aug. 30 to vote upon bonding proposition.

NAPPANEE, IND.—Bids are asked until Sept. 5 for construction of several sewers. Q. G. Reinoehl, Town Clk.

INDIANAPOLIS, IND.—Board of Public Works has postponed action on West Indianapolis sewer system until Oct. 3. M. A. Dowling is Chn. Estimated cost is placed at $197,000.

NEW ALBANY, IND.—Sewer system under consideration. Cost is estimated at $185,000. It will have an outlet into the Ohio River at Walnut St.

MONTICELLO, IND.—Bids are asked until Aug. 30 for the construction of a large sewer. W. J. Gridley, Cy. Clk.

HOLLAND, MICH.—Bids are asked by Board of Public Works until Aug. 19 for the construction of a lateral sewer on 15th St., as follows: 1,984 ft. of 9-in. sewer, average cut 8.15 ft.; eight manholes and 94 house junctions; also for a lateral sewer on 15th St., as follows: 1,850 ft. of 8-in. sewer, average cut 7.70 ft.; seven manholes and 88 house junctions; also for a lateral sewer on Seventh St., as follows: 425 ft. of 8-in. sewer, average cut 6.58, and 756 ft. of 8-in. sewer, average cut 8.95 ft.; five manholes and 56 house junctions. Wm. O. VanEyck, Clk.

WYANDOTTE, MICH.—Riggs & Sherman, of Toledo, have submitted estimated cost of proposed sewer work. It is placed at $51,000 for sanitary and $66,000 for storm sewers. The pumping plant, that has been adopted, will cost about $3,500.

MUSKEGON, MICH.—Council has authorized construction of four sewers. Cost, $9,000. Work will be done by city and no contracts will be let.

URBANA, ILL.—Bid of J. H. Palmer, of Danville, for new sewer works was accepted. Improvement consists of four districts and a septic tank, as follows: District No. 11, $5,113; No. 12, $10,000; No. 13, $4,493; No. 14, $18,226; septic tank, $4,480.

JACKSONVILLE, ILL.—Trunk sewer is under consideration. Three plans are proposed. Estimated costs are $192,400, $165,700 and $153,700.

CHICAGO, ILL.—Specifications have been prepared by C. F. Hermann, Cy. Arch., for sub-contracts for a sewerage pumping station to be built at 39th St. and the lake. Bids will be received by F. W. Blocki, Comr. Pub. Wks., City Hall. It will be one story, of steel construction, with exterior walls of cut stone or granite, interior walls of enamel brick, tile roof, tile floor, steam heat, electric light. Work will be let separately instead of, as heretofore, to a general contractor. Cost, $150,000.

CHICAGO, ILL.—The M. P. Byrne Construction Co. has been awarded the contract for building the 79th St. sewer system. The contract involves the construction of fourteen miles of concrete sewer, at $957,207. There were three bidders, the others being as follows: Nash Bros., $968,545; Nash & Dowdle, $999,276. At a former bidding the lowest estimate was $967,450, made by Nash & Dowdle.

JANESVILLE, WIS.—C. V. Kerch, Cy. Engr., writes that M. J. Benson, 84 La Salle St., Chicago, was awarded contract for sewers in Districts 5, 6, 11 and 12, at $27,814.

PERRY, IA.—Sealed bids are asked for making plans and specifications for a sewer system. B. C. Dilenbeck, Chn. Sewer Com.

ST. PAUL, MINN.—Chris Johnson was awarded King St. sewer contract at $2,035.

SPOKANE, WASH.—Peter Costello was lowest bidder for Riverside Ave. sewer contract, at $3,880.

LOS ANGELES, CAL.—Williams & Belzer were lowest bidders for Flower St. sewer contract, at $11,647.

SAN PEDRO, CAL.—The Board of City Trustees will abandon former plan of sewering the city in sections or small districts, and preliminary steps have been taken to call a bond election for the purpose of building three outfall sewers. City Engineer Whitman will prepare plans. Estimated cost, $12,000.

SAN JOSE, CAL.—Bids are asked until Aug. 22 for building sewers in Ninth and Sixth Sts.

OGDEN, UTAH.—Louis C. Kelsey was awarded contract for construction of sewer in District No. 9, at $41,498.

BOISE, IDAHO.—Chas. H. Irwin, Cy. Engr., writes that James Kennedy, of Fargo, N. D., was awarded Main St. sewer contract at $114,965.

BERLIN, ONT.—Sewer Commissioners have awarded the contract for the erection of two septic tanks and reservoir on new Genz sewer farm to Casper Braun, at $16,404.

OUTREMENT, QUE.—J. Kruse writes that John Keegan was awarded contract for two sewers.

PORTAGE LA PRAIRIE, MAN.—(See Water-Works.)

GARBAGE DISPOSAL—STREET CLEANING

ELMIRA, N. Y.—Bids are asked by Committee on Garbage Disposal until Aug. 26 for construction of garbage disposal plant. Isaac H. Levy, Cy. Clk.

LONG ISLAND CITY, N. Y. (L. I.)—Contract for constructing new crematory for Rockaway Beach, bids for which were received Aug. 8, is stated to have been let to William Nolan for $24,575.

SCHENECTADY, N. Y.—Ordinance will probably be acted upon by Council Aug. 23, providing for collection and removal of garbage. Ordinance provides that contract must be let before Dec. 1.

CHARLEROI, PA.—Ira L. Nickeson, Borough Clk., will receive bids on street sprinkler, 450 to 600 gallons capacity, wood tank, etc.; and also for one street sweeper for the borough.

CRAFTON, PA.—Bids are asked until Sept. 6 for construction of garbage furnace, to include furnace, brick building and brick stack. W. O. H. Elliott, Borough Clk.

CINCINNATI, O.—Cincinnati Reduction Co., which has contract for removal of garbage in the city, has submitted an estimate of the cost of removing garbage in the recently annexed villages.

DULUTH, MINN.—Establishment of municipal garbage crematory is under consideration, and Dr. D. D. Murray, Health Comr., is in correspondence with various cities that own plants.

STREETS AND ROADS.

CAMBRIDGE, MASS.—An order authorizing the Superintendent of Streets to expend the unexpended balance of the $29,600, recently appropriated, for construction of Madison and other streets, in the construction of Magoun, Warren and Third Sts., was adopted by the Council.

BEVERLY, MASS.—It is understood that as soon as a survey is completed for the new road from Danvers River bridge to Bridge St. bids will be asked for by Essex County Commissioners.

HAVERHILL, MASS.—The contract for macadamizing state highway from River St. ball grounds to Willowdale, about a mile, has been awarded Edward Adams of Lawrence.

PITTSFIELD, MASS.—The Highway Commission in Boston awarded to John W. Polearo, City, the contract for construction of state highway for $7,200.

HARTFORD, CONN.—Highway Commissioner McDonald has awarded a contract for construction of a highway in Norwich to the selectmen of that town. The work includes macadam road at $1.80 per lin. ft., telford at $2 and cobble gutter at 20 cts.

The Commissioner has awarded to the B. D. Pierce, Jr., Co. of Bridgeport a contract for construction of 2,386 ft. of macadam road and 473 ft. of telford in Saybrook at $5,174.

VERNON, CONN.—A. Brazor & Sons, of Middleton, have been awarded the contract for building two sections of road here. The first section consists of 2,150 ft. macadam and 1,800 ft. telford; the second section consists of 784 ft. macadam.

TOLLAND, CONN.—Bids are asked by Board of Selectmen until Aug. 20 for the grading of one section of road and construction of a rubble drain. Plans and specifications on file.

SOUTH MANCHESTER, CONN.—A. C. Sternberg was awarded the contract to build a macadam road on Charter Oak St. for $4,200.

SIDNEY, N. Y.—Theodore D. Allen, contractor, was awarded the contract for laying 5,000 yds. Reese-Hammond block.

BROOKLYN, N. Y.—Robertson & Gerehart, 77th St. and Third Ave., Brooklyn, have just secured the contract from the Borough of Brooklyn for the grading, curbing, etc., of 75th St. from Second Ave. to the Shore Road, some 50,000 cu yds. of excavation. They have also secured the contract from the Park Dept. for the widening of the Shore Road amounting to about $50,000. The work consists of building rip-rap wall, furnishing embankment, sodding, macadamizing, etc. The Harper Machinery Co., Park Row Bldg., New York, are furnishing the necessary material for this work, such as cars, rails, etc.

LONG ISLAND CITY (L. I.), N. Y.—The award for grading, curbing and flagging Potter Ave. was given to Wm. E. Lowe at $15,266, and Fourth Ave. to Peace Bros., at $6,378.

NEW YORK, N. Y.—Bids are asked by Maurice Featherson, Comr. of Docks, Pier A, until Aug. 25 for laying granite pavement between East 131st and East 132d Sts. and Park Ave., Harlem River, and between West 130th and West 131st Sts., North River.

NEW BRIGHTON, N. Y.—Bids are asked by Geo. Cromwell, Pres. Boro. Richmond, until Aug. 30 for repaving with second-hand granite block pavement on sand foundation, Burgher and Bennett Aves. and Morningstar Road.

BROOKLYN, N. Y.—Bids are asked by Martin W. Littleton, Pres. Boro. Brooklyn, until Aug. 24 for constructing concrete sidewalks in various streets, grading, macadamizing, etc.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

JERSEY CITY, N. J.—Newark Ave. is to be paved with granite block pavement at a cost of $36,000. Henderson, Grove, Grand and Hudson Sts. are also to be repaved. Est. cost, $27,000.

HARRISBURG, PA.—Joseph W. Hunter, State Highway Comr., writes us that the date upon which the bids for construction of road in Smithfield Township were to be opened has been changed from Sept. 2 to Sept. 12. Specifications on file in office of Engineering News, 220 Broadway, New York.

PITTSBURG, PA.—Bids are asked by R. J. Cunningham, County Controller, until Aug. 27 for repairs of Frankstown Ave., for a distance of 3,200 ft. with Belgian block or vitrified brick, also for grading and preparing foundation. Specifications can be had at office of F. W. Patterson, County Rd. Engr., 29 Court House.

ANNAPOLIS, MD.—State Road Engineer Johnson has given the estimates for the two routes of the proposed macadamized road from Belair to Havre de Grace. Albino route is $32,407, and by Level route, $33,474.

CUMBERLAND, MD.—The city has adopted 12,000 sq. yds. Reese-Hammond block for their streets. John D. Dravoe & Co., contractors.

CUMBERLAND, MD.—An ordinance has been passed by the City Council for the paving of Virginia Ave. James Storer and Philip G. Shawacre were appointed to look after the work.

MONTGOMERY, ALA.—The ordinances to pave Adams St. with brick and to pave sidewalks on Mildred St. with hexagon blocks were referred by City Council to committee on streets.

CLEVELAND, O.—Bids are asked by A. R. Callow, Secy. Bd. Pub. Wks., 105 City Hall, until Aug. 23, for grading, draining and otherwise improving a portion of Edgewater Park. Plans and specifications may be seen at office of Park Engineer.

TOLEDO, O.—The Board Public Service, Aug. 8, awarded the following contracts: H. B. Streicher, paving, Huron and Wabash Sts., est. cost, $4,478 and $5,928 respectively; W. J. McMahon, Frederick St., $7,417.

YOUNGSTOWN, O.—F. M. Lillie, Cy. Engr., is preparing plans and estimates for the grading of North Ohio Ave. Work will be commenced as soon as plans have been completed.

OTTAWA, O.—Bids are asked by Putnam County Commissioners until Sept. 3 for construction of Blosser and Simon stone roads. Specifications on file at Auditor's office. O. C. Talbot, County Engr.

CINCINNATI, O.—Council will probably pass an ordinance authorizing the issue of $36,000 bonds for the purpose of improving Second St.

Bids are asked by Board Public Works until Sept. 6 for grading, curbing, macadamizing, etc., the right of way for approaches to Grandin Road viaduct.

CINCINNATI, O.—A contract was awarded to Ed. S. Glasson by Board Public Service for the paving of Ellison Ave. with brick for $12,298.

The William Heffron Const. Co. got the contract for improving Hackberry St. with brick at $9,408.

XENIA, O.—Bids are asked by Board Public Service until Sept. 8 for paving Detroit St.

FORT WAYNE, IND.—The Board Public Works is considering the paving of Devald and Pearl Sts. and laying sidewalks in Piqua Ave.

INDIANAPOLIS, IND.—Bids are asked by Board Public Works until Aug. 26 for grading and paving sidewalks on DeQuincy and Downing Sts. with cement and grading roadway of Lasalle St.

GREENSBURGH, IND.—Bids are asked by Decatur County Commissioners until Sept. 5 for construction of three gravel roads, according to plans and specifications on file with Frank E. Ryan, County Audr.

BROWNSTOWN, IND.—Bids are asked by Jackson County Commissioners until Sept. 5 for construction of 19 miles of gravel road according to plans and specifications on file with A. H. Manuel, County Audr.

SOUTH BEND, IND.—It is reported that bids will be received by Board Public Works until Aug. 24 for paving Napier St. and an alley with brick.

BRAZIL, IND.—Bids are asked by Clay County Commissioners until Sept. 5 for construction of various highways by grading, graveling and macadamizing. Plans and specifications on file with J. Frank Smith, County Audr.

MUNCIE, IND.—Bids are asked by Common Council until Aug. 29 for construction of a combined cement curb and gutter on Willard St. Plans and specifications on file in office of City Engineer. R. J. Hickok, Cy. Clk.

TELL CITY, IND.—Bids are asked by Frank Hinkel, Cy. Clk., until Aug. 23 for grading and graveling on Mozart St.

MORRIS, ILL.—Bids are asked by Board of Local Improvements until Aug. 22 for sewering, grading, curbing and paving Washington and Liberty Sts. with brick on 6-in. concrete foundation, consisting of about 8,720 cu. yds. excavation, 4,510 ft. curbing, 22,129 sq. yds. pavement, 2,171 ft. of 8-10-in. sewer, 48 catchbasins and 3 manholes. John K. Telber, Pres. (Advertised, Engineering News.)

TAYLORVILLE, ILL.—Two miles of brick street paving has been ordered by City Council.

WILMETTE, ILL.—Bids are asked by Board Local Improvements until Aug. 24 for grading, curbing and paving with brick on Lake Ave. Specifications on file with Board and at office of W. S. Shields, 1715 Marquette Bldg., Chicago.

COUNCIL BLUFFS, IA.—The West End Improvement Club will ask the Council to macadamize West Broadway.

BURLINGTON, IA.—Resolution to construct sidewalks on several streets was approved by the Mayor. C. W. Droegemeyer, Cy. Clk.

LINCOLN, NEB.—Bids are asked by Geo. L. Campen, Cy. Engr., until Aug. 22 for paving roadway in repaving district No. 26, with repressed vitrified brick. Plans and specifications on file.

ST. PAUL, MINN.—Final orders were passed by the Aldermen for improvements aggregating $62,000, which included the following: Paving with asphalt Fort St., $13,570; paving with sand stone East Fourth St., $28,000; curbing with sandstone and improving Ashland Ave., $3,369; curbing with sandstone and improving Central Ave., $11,005; curbing with sandstone and improving Hague Ave., $2,276; curbing with sandstone and improving Milton St., $2,020; curbing with sandstone and improving Farrington Ave., $1,646.

WILLISTON, N. DAK.—Bids are asked by City Council until Aug. 22 for construction of about 4,000 lin. ft. of cement or tile sidewalks, 12 ft. wide, with curb. Specifications on file in office of Zeno Bruegger, Cy. Audr.

ST. JOSEPH, MO.—Ordinances providing for the grading of Cedar and 18th Sts. was presented to the Common Council, also for the grading, curbing and paving with vitrified brick on 18th St. Frank W. Beach, Cy. Clk.

A petition has been presented to the Board Public Works asking for the resurfacing of Frederick Ave. with rock asphalt. This work, according to press reports, will be started in the near future.

MUSKOGEE, IND. T.—The City Council has let a contract to the Oklahoma Paving & Cement Co. of Guthrie to the streets in business section with Muskogee brick at $1.69 per sq. yd.

SEATTLE, WASH.—City Council has ordered the paving of Pine St. with asphalt. Est. cost, $21,000.

The following improvements have been awarded by the Board Public Works:

Mercer St. et al, concrete walks, $15,144, Frank & Brandon; East Green Lake Boulevard et al, wood sidewalks, $25,146, A. Thorsvig; 21st Ave., concrete sidewalks, $4,430, T. Ryan; Third Ave., asphalt paving, $6,425, Barber Asphalt Paving Co.; Alder and East Pine Sts., concrete sidewalks, $15,456, Fritch & Co.; Broad St. et al, grading, $44,255, P. J. McHugh. R. H. Thomson is Cy. Engr.

UKIAH, CAL.—Bids are asked by Board of Supervisors until Sept. 7 for the Covel Road.

LOS ANGELES, CAL.—The Downey Ave. and East Main St. bridges across the Los Angeles River are to be improved by paving the approaches with wooden block covered with asphalt.

SALT LAKE CITY, UTAH.—P. J. Moran, City, was awarded the contract for paving of First St. by Board Public Works for $17,361.

The lowest bid received for the paving of Brigham St. was that of the City Street Improvement Co. of San Francisco for $105,859.

MANUFACTURING PLANTS.

MANCHESTER, CONN.—The J. T. Robertson Soap Co. contemplate erecting a new building on Oakland St. this summer. The capital of the company was recently increased to $50,000.

BUFFALO, N. Y.—Bids are asked by Department Public Works, City and County Hall, until Aug. 19 for the erection of a 1-story brick forge shop, including the necessary electrical and mechanical equipment for high school manual training, to be located in District No. 11, on Elm St., near Eagle St., as follows: Masonry, carpentry, roofing, metal work, heating, plumbing, etc. Electrical work and equipment, including motor, forges, blower, fan, etc. Francis G. Ward, Comr. Pub. Wks.

NEWBERRY, PA.—The contract for the erection of the new repair shops of the Philadelphia & Reading R. R. Co here has been let to Harry B. Shoemaker & Co., of Philadelphia, and work will begin at once.

ALTOONA, PA.—Plans are being prepared for an addition and other improvements to the Edison electric light plant. New machinery is contemplated and a large storage battery will probably be installed.

SCRANTON, PA.—The Beynard Silk Co., of Taylor, is soon to begin work on its new mill here. Engine and boiler houses will also be erected.

SHARON, PA.—The Driggs-Seabury Ordnance Co., which will manufacture army and navy ordnance and projectiles, has been organized with $500,000 capital and will build a plant here on Sharpsville St. The erection of a machine shop and three other buildings will be started at once. John Stevenson, Jr., is Pres.

PHILADELPHIA, PA.—Dodge & Day, Engrs., Philadelphia, have completed plans and specifications for extension to plant of the Victor Talking Machine Co. They contemplate the use of 600-HP. horizontal tubular boilers, four units each, 18 ft. long by 72 ins. in diameter, with a working pressure of 125 lbs., natural draft; two horizontal, automatic, high-speed engines, 160 and 240 HP., respectively, direct-connected to a 100-KW. and 150-KW. generator; 15 electric motors, ranging from 5 to 75 HP.; two elevators; heating system; fire, feed-water and vacuum pumps; switchboard and wiring; sprinkler system; water tanks, etc.

PHILADELPHIA, PA.—Milligan & Webber, Archs., 520 Walnut St., have invited bids for a rectifying house at Third and South Sts. for Jacob Cartun. Brick, four stories, 20 × 100 ft.

PHILADELPHIA, PA.—Robt. Beatty & Bros., 2314 East Dauphin St., have been awarded the contract for erecting an extract house at Ontario and aBth Sts. for the Berg Glue Co. Brick, two stories, 75 × 130 ft.

PHILADELPHIA, PA.—Ballinger & Perot, Archs., 1200 Chestnut St., are preparing plans for a factory for M. Phillips & Son and for Jacob Gebhart & Son.

PITTSBURG, PA.—The W. L. Singer Ice Co., McKees Rocks, has awarded the contract to the Henry Vogt Machine Co., Louisville, Ky., for a new ice plant on Furnace St. Cost, $40,000.

LEWISTOWN, PA.—The Lewistown Brick & Supply Co., care of W. A. Kellar, will soon have plans started for a brick plant with a daily capacity of 30,000 bricks.

CHAMBERSBURG, PA.—The Cumberland Valley Brewing Co, care of James F. McFern, will soon have plans started for a brewery. Brick and steel, fireproof. Cost, $100,000.

PITTSTON, PA.—The Alpine Brewing Co., care of D. Glennon and Ed. Rutledge, has recently been chartered and will have plans started at once for a brewery at this place.

NORTH WALES, PA.—The Asbestos Fiber Spinning Co. has invited bids for an addition to their factory. Brick, two stories, 100 × 50 ft.

PARSONS, W. VA.—The Parsons Pulp & Paper Co., R. F. Whitmere, of Philadelphia, Pres., according to the "Pink Sheet Daily Bulletin," will erect a large paper mill in the fall. The company's main office is in the Girard Trust Bldg., Philadelphia, Pa.

HARTSVILLE, S. C.—M. S. McKinnon and A. M. McNair will establish a factory here to manufacture coffins, tables and mantels. Capital, $12,000.

MARION, S. C.—It is proposed to organize a company with capital stock of $150,000 to build a cotton factory here. Henry Mullins is interested.

GREENVILLE, S. C.—The Carolina Cotton Mills contemplate increasing their capital stock from $50,000 to $100,000 and also to enlarge the present mill building and install 160 looms. J. E. Sirrine, City, will be in charge of the construction and installation of machinery.

BEVERLY, GA.—An improved cotton gin will be erected here. Brown Bros., of Elberton, Ga., are the principal owners.

CUTHBERT, GA.—The Cuthbert Oil Co., capital $30,000, has been chartered by J. J. McDonald, Geo. McDonald and others, to manufacture and refine cotton oil, manufacture fertilizers, ice, etc.

SAVANNAH, GA.—A new excelsior factory is to be established here by the Southern Mfg. Co., which will be capitalized at $40,000. The company will manufacture excelsior by a new process from pine, cottonwood and cypress. H. L. Blanchard, of New Orleans, La., is Supt.

JACKSONVILLE, FLA.—The Duval Planing Mill Co. will erect a saw and planing mill. The motive power is to be electricity. C. G. Bucci is Mgr.

CULLMAN, ALA.—F. V. Tilford and Geo. H. Parker have completed the organization of the Cullman Fertilizer & Warehouse Co., with a capital of $25,000. The factory will be moved to another location and a new building erected.

RIVERSIDE, ALA.—The Riverside Brick Co., capital $44,000, has been incorporated by T. C. Thompson, W. H. Thompson and B. A. Thompson. The incorporators have purchased the brick-making plant at Riverside and will operate it, enlarging its capacity from time to time. They have also acquired clay lands adjoining the plant.

NEWTON, MISS.—R. K. Dent and M. and H. M. Fout will organize a company with $25,000 capital to erect a factory for the manufacture of wagons.

BILOXI, MISS.—E. C. Joullien, of this place, is organizing a company to erect a large oyster canning factory.

FRANKLIN, LA.—A company will be organized with $50,000 capital, to erect a canning factory. T. M. Moorman, Thomas Bodin and Walter Y. Kemper are interested.

BURAS, LA.—The Crescent Oyster Co. is to erect a big oyster cannery with a capacity of 500 bbls. of oysters a day. The company is in the market for plans and specifications, and for the equipment.

MILBURN, LA.—A new hardwood saw mill is to be erected near this place by Kilpatrick & Caldwell.

MEMPHIS, TENN.—The Knoxville Woolen Mills has increased its capital from $600,000 to $750,000. The company contemplates enlarging its woolen plant.

NASHVILLE, TENN.—A factory for the manufacture of straw paper and straw board will be established here. R. J. McKay, Secy. Retail Merchants' Assn., can give information.

BRISTOL, TENN.—The Adams Bros. Co. will establish a modern brick plant with a yearly capacity of 7,000,000 brick. The new plant will have steam dryers and all modern machinery. Work will commence at once.

MARYVILLE, TENN.—C. Pflanze, Louie Pflanze and James Richie will erect a furniture factory here. They have purchased six acres of land and will let the contract at once for the erection of buildings. The machinery building will be 50 × 100 ft., two stories high.

MANCHESTER, TENN.—The Chesterton Cooperage & Lumber Co., of Chesterton, Ind., has purchased 2,500 acres of timber land in this section and will erect a plant for the manufacture of spokes, staves and all kinds of lumber. Capital, $20,000. A. E. Boyce can inform.

NASHVILLE, TENN.—The A. L. Hayes Co. will rebuild its stave factory, burned in South Edgefield, at a cost of $20,000. The work is to be done at once.

NASHVILLE, TENN.—The Hill Trunk Co. will increase its capital to $25,000. The plant will probably be enlarged and other improvements made.

HAMILTON, O.—The felt factory of the Frank Schantz Mattress Co. was destroyed by fire. Loss, about $35,000.

EVANSVILLE, IND.—Bids are asked by Board Public Works until Sept. 10 for construction of the Evansville Metal Bed Works. Harris & Shopbell are Archs. Brick, steel trusses, two stories, 160 × 360 ft.

CHICAGO, ILL.—Bids are asked by City of Chicago until Aug. 22 at 222 City Hall, for the erection complete of meter testing addition to repair shops on Ashland Ave. Plans and specifications on file in office of Department Public Works, 323 City Hall. F. W. Blocki, Comr. Pub. Wks.

CHICAGO, ILL.—It is reported that the Illinois Steel Co. will expend $750,000 for remodeling and improving their plate mills.

ELGIN, ILL.—Fire destroyed the buildings and machinery of the Fauber Mfg. Co. Loss, $325,000.

DES MOINES, IA.—The Des Moines Hosiery Mills announce improvements in contemplation which greatly increase the capacity of the mills. It is proposed to build a new warehouse and shipping building of brick and steel 54 × 148 ft. Additional machinery will be installed following the completion of the warehouse.

ST. LOUIS, MO.—The plant of the American Refrigerator Transit Co. was destroyed by fire. Loss, $50,000.

EL PASO, TEX.—Lee Booker has arranged for the erection of large saw mills in northern Chihuahua, 250 miles south of El Paso. There is a probability of extending the Sierra Madre Railroad, also of building a new road from Douglas, Ariz., so that both sides of the range can be developed.

HALLETTSVILLE, TEX.—The Hallettsville Truck Growers' Association will probably erect a canning factory. The secretary can give information.

SAN LUIS OBISPO, CAL.—L. J. Beckett states that a catsup factory will probably be erected here in the near future.

EUREKA, CAL.—Chas. Kressmann and Jacob Dorrer intend to erect the new brewery plant near South Park, and bids for the construction of the building will be invited in a short time.

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PALO ALTO, CAL.—Cooley Bros. intend to er[illegible] a-cannery plant at Cooley's Landing. Cost, $35,0[illegible]

VANCOUVER, B. C.—Ramsey & Powell wil[illegible]ect an addition to their factory. Improvements will c[illegible] $5,000, exclusive of installing machinery and fixtures.

MISCELLANEOUS CONTRACT[illegible]

RIVER STRAIGHTENING.—Keytesville, M[illegible] County Court has authorized the straightening of the [illegible]ariton River.

CAR WHEELS.—Ottawa, Ont.—Railway depar[illegible]t has let contract for 3,000 car wheels to Rhodes, Cu[illegible] & Co., for $35,000.

DOCK.—South Norwalk, Conn.—City is stated [illegible] have voted Aug. 9 on purchasing public wharf and [illegible]airing same at a cost of $10,000.

IRON PIPE.—Pittsburg, Pa.—National Tube Co [illegible]s secured contract for 150,000 tons of finished pipe t[illegible]e delivered to a Kansas oil field.

PIER.—Norfolk, Va.—Norfolk & Western Ry., [illegible]ording to reports, is considering construction of anot[illegible] large coal pier at Lambert's Point.

DRAIN RECONSTRUCTION.—Marlboro, Mass.—[illegible]y intends to reconstruct Florence St. drain at a cost [illegible] about $7,000. F. R. S. Mildon is Mayor.

MARINE WAYS.—Mobile, Ala.—East Side Doc[illegible] Co. is stated to be considering construction of mari[illegible] ways at Alabama Port at a cost of $5,000.

LEVEE.—Natural Steps, Ark.—Formation of le[illegible] district to build three to five mile long levee is likely. Ewing Kinkead, Natural Steps, is interested.

DITCH.—Knox, Ind.—Contract for construction [illegible] ditch, involving about 155,300 cu. yds. excavation, has [illegible]n let to John A. Brombaugh, Elkhart, Ind., for $11,64[illegible]

DITCH.—Des Moines, Ia.—Citizens of Lincoln Township have petitioned County Supervisors for construction of drainage ditch in northwestern part of that town[illegible].

VESSEL YARD.—Duluth, Minn.—Whitney Bro[illegible] Co., Superior, Wis., was low bidder Aug. 8 at $16,671 for building vessel yard for U. S. Government at this place.

RETAINING WALL, ETC.—Glens Falls, N. Y.—This village will let contract Sept. 5 for constructing retaining wall and granite paving. George P. Slade, Village Engr.

PIER.—Vienna, Md.—Baltimore, Chesapeake & Atlantic Ry., according to reports, is to build new pier at this place. T. A. Joynes, Baltimore, Md., is Supt. Steamer Lines.

DITCH.—Huntington, Ind.—Commissioners of Allen, Wells, Whitley and Huntington Counties have reached an agreement for the construction of Little River ditch. The est. cost is $100,000.

GRAIN ELEVATOR.—Omaha, Neb.—Barnett & Record, Minneapolis, Minn., are stated to be preparing plans and specifications for new elevator to be erected at 20th and Commercial Sts. for Twamley & Sons.

DREDGING.—Dayton, O.—It is reported that the Miami & Erie Canal Transportation Co. is to be completely reorganized and that measures will be taken to dredge the canal the entire distance from Dayton to Cincinnati.

TELEPHONE WORK.—Pine Bluff, Ark.—The Southwestern Telegraph & Telephone Co., according to reports, will spend about $75,000 in improving its service at Pine Bluff, including the placing of its wires underground.

LEVEES.—Pine Bluff, Ark.—It is stated that Committee of Plumb Bayou Levee District are to call for bids soon for building 23 miles of levee along Arkansas River in Plumb Bayou township. M. L. Altheimer is Secy. Com.

FLOATING BOAT HOUSE.—Washington, D. C.—Bids are asked by U. S. Lift Saving Service, Horace L. Piper, Gen. Supt., Washington, D. C., until Aug. 26 for construction of floating boat house for Gray's Harbor, Wash., life saving station.

TILE DRAIN.—Green Valley, Ill.—Bids are asked by Commissioners Drainage District No. 1, Green Valley, until Sept. 2 for constructing about 9,600 ft. 15-in. tile drain, about 5 ft. deep. Contractor to furnish tile. Charles E. Schureman, Comr.

DAM.—Boston, Mass.—Engineering force of Charles River Basin Commission has about completed plans and specifications for the proposed dam across the Charles River, and it is expected to get out preliminary specifications for the work early in September.

EMBANKMENT.—Chicago, Ill.—Bids are asked by Trustees Sanitary District of Chicago, Security Bldg., until Oct. 12 for completing double-track embankment on line of A. T. & S. Fe Ry., requiring about 18,131 cu. yds. of filling. Zina R. Carter, Pres. Trus.

BRICK.—Cleveland, O.—Bids are asked until Aug. 19 for furnishing and delivering all brick that may be required by the water-works division of the Board of Public Service during 1904. About 250,000 brick will be required. A. R. Callow, Secy. Bd. Pub. Service.

CRIB REMOVAL.—Cleveland, O.—Bids are asked by the Board of Public Service, 105 City Hall, until Sept. 13 for the removal of two temporary cribs located in Lake Erie, belonging to the water-works. W. J. Springborn, Pres. A. R. Callow, Secy. (Advertised, Engineering News.)

EXCAVATION.—Crysler, Ont.—Bids are asked by J. A. Cockburn, Township Clk., until Aug. 25 for necessary excavation for change of course of Payne River; also for excavation and construction of concrete piers over the Payne River. W. H. Maywood, Cornwall, Ont., is Engr.

DITCH, LEVEES, ETC.—Columbus, O.—Specifications and bidding sheet for excavating ditch, and building levees and masonry structures for this city are on file at office of Engineering News, 220 Broadway, New York. Bids are asked until Aug. 31, as advertised in Engineering News.

TUNNEL.—New York, N. Y.—The Board of Aldermen have formally approved the route and general plan of the extension of the Brooklyn tunnel from Flatbush and Atlantic Aves. to Ocean and Parkside Aves. This extension was laid out by the Rapid Transit Commission some months ago.

PARK.—New York, N. Y.—Chelsea Local Board of Public Improvements is to recommend to the Board of Estimate the establishment of a new park on the block bounded by Ninth and Seventh Aves, 27th and 28th Sts. It is estimated that the cost of acquiring the land and turning it into a park will be about $1,750,000.

RETAINING WALL.—Chicago, Ill.—F. H. Bainbridge, Chicago, Supt. Bridges, Illinois Central R. R., is stated to have completed plans for 6,000 ft. long retaining wall which the company proposes to build on western line of its right of way and on west line of made land at Grant Park, at a cost of about $150,000. Work was to be started as soon as plans were approved by the South Park Commissioners.

OIL PIPE LINE.—Los Angeles, Cal.—Bids are asked by H. J. Leland, Cy. Clk., until Sept. 12 for franchise for oil pipe line over certain streets, as applied for by Salt Lake Oil Co.

STONE MASONRY WORK.—Cleveland, O.—Bids are asked by County Commissioners until Aug. 31 for constructing stone masonry work in Royalton Township and Middleburg Township.

FIRE ENGINES, PARKS.—Santa Monica, Cal.—Election was to be held Aug. 16 to vote on $250,000 bond issue, $14,000 of which is for two fire engine houses and equipment and $20,000 for public parks and two concrete bridges.

STEEL TOWERS, ETC.—Los Angeles, Cal.—Trustees have adopted ordinance granting Edison Electric Co. right to construct and maintain 15 steel towers along the east line of the official bed of the Los Angeles River and to construct foundations of cement piers.

TELEPHONE SYSTEM.—Montrose, Colo.—Bids are asked by the U. S. Reclamation Service, Chamber of Commerce Bldg., Denver, until Sept. 22, for the construction and completion of a telephone system about 28 miles long. A. L. Fellows, U. S. Geological Survey. Thos. Ryan, Act. Secy. (Advertised, Engineering News.)

TORPEDO BOAT OUTFITS STOREHOUSE.—Norfolk, Va.—Bids are asked by Bureau Yards and Docks, Washington, D. C., until Sept. 10 for constructing brick and steel building about 50 × 150 ft. at Norfolk, Va., Navy Yard for storehouse for torpedo boat outfits. Specification for above work are on file at office of Engineering News, 220 Broadway, New York.

STONE-CRUSHING PLANT.—Chicago, Ill.—Bids are asked by Inspectors of House of Correction, 26th St. and California Ave., until Aug. 24 for furnishing and delivery of a complete stone-crushing plant of 500 cu. yds. capacity per ten-hour day, stone to be crushed to a size to pass a 2½-in. ring. Plant will include one 150-HP. Corliss engine, two 100-HP. boilers, and all necessary heaters, pumps, crushers, screens, elevator, cars, hoists, stack, shafting, fittings, etc.

TUNNELS.—Chicago, Ill.—City Engineer Ericson is preparing plans for new water, police and fire alarm tunnels which pass through Washington and La Salle St. tunnels. The Western Union Telegraph Co., the Postal Telegraph & Cable Co., the Chicago Telephone Co., and the Edison Electric Co., which have small tunnels in the Washington and La Salle St. tunnels, have notified the city officials that when the tunnel lowering begins they will individually construct new tunnels.

IRRIGATING ORANGE GROVE.—Tampa, Fla.—R. F. Bettis, Co. Surv., writes us that he is planning to irrigate an orange grove covering about 30 acres of land. It is desired to run about 90,000 gallons of water over the grove every 24 hours from a lake 3,600 ft. away. Water lifts will have to be used, and information regarding hydraulic rams is wanted, as it is desired to avoid using steam or wind mills. Mr. Bettis wants to use 8-in. terra cotta to convey the water to the ram.

RIVER RECLAMATION.—California.—A correspondent sends us the following: As a result of the River Convention held in May, the Commissioner of Public Works of Sacramento, California, has called in a Commission of Engineers to examine and report upon plans for the reclamation from inundation of lands in the San Joaquin and Sacramento Valleys, and the rectification of these rivers. The engineers composing the commission are: Major Thomas G. Dabney, Chief Engineer Yazoo-Mississippi Delta Levee District, Mississippi; Major Henry B. Richardson, of New Orleans, recently appointed on Mississippi River Commision; Major H. M. Chittenden, Corps of Engineers, U. S. A., and Mr. M. A. Nurse, Engineer of the California State Board of Public Works. The Commission met in San Francisco August 9, and after organizing by the selection of Major Dabney as Chairman, proceeded at once upon its work of investigation. The Commission will examine all reports bearing on the subject, which have been made heretofore, one such by James B. Eads and one by J. Hamilton Hall, former State Engineer. Also, a report of the United States Geological Survey on the flow, discharge and reservoir sites of both the Sacramento and San Joaquin Rivers. An examination of the rivers will be made by boat. Lieutenant Colonel William H. Heuer, Corps of Engineers, U. S. A., and Mr. J. B. Lippincott, Supervising Engineer of the U. S. Geological Survey, will co-operate with the Commission.

MINING NOTES.

REDUCTION PLANT.—Phoenix, Ariz.—It is stated that construction of reduction plant will be undertaken soon for the Imperial Copper Co. W. F. Staunton is Gen. Mgr.

STAMP MILL.—Sutter Creek, Cal.—Local reports state that the owners of the South Eureka mine intend to build a new 20-stamp mill near the old one. B. B. Haven is Supt.

MILLING PLANT.—Redding, Cal.—It is reported that S. Jones and M. Russell, of Wallace, Idaho, will acquire the Washington mine at French Gulch and will enlarge the milling plant.

COPPER MINING.—Houghton, Mich.—Superior Copper Co. has been organized with $2,500,000 capital to develop copper ore deposits. Reginald C. Pryor is Pres. and James P. Edwards, Secy.

MINING WORK.—Tucson, Ariz.—Mineral Hill Copper Co., Col. Thomas Hughes, Mgr., has acquired 30 claims and will develop them, probably adding concentrating plant if property warrants it.

MINING COMPANY.—Denver, Colo.—Coriolanus Mines Co. has been incorporated with $2,000,000 capital to do general mining business in Teller County. J. P. Pomerey and Thos. E. Poole are interested.

MINING COMPANY.—Cripple Creek, Colo.—Snoeshoe Mining & Milling Co. has been incorporated with $2,000,000 capital, to operate in Cripple Creek District. C. Geiger and A. C. Cross are interested.

CRUSHING PLANT.—Redlands, Cal.—It is reported that a crushing plant will be installed at the old tin mines at Temescal, which are being reopened under charge of Geo. I. Leonard, Mining Engr., Corona, Cal.

COAL COMPANY.—Jasper, Ala.—Merrimac Coal Co. has been incorporated with $50,000 capital to develop coal lands near Corona. Horace P. Gibson, Corona, Ala., is Pres., and J. G. Hughes, Birmingham, Ala., Secy.

STAMP MILL.—Douglas, Ariz.—Local reports state that J. L. Obermiller, Supt. of Roy mine, expects to increase the capacity of the ten-stamp mill, and it is likely that a plant will be added for further treatment of concentrates.

STAMP MILL, ETC.—California.—The Lone Star Gold Mining Co. has been organized by Colton, Cal., citizens with a capital of $100,000 to develop claims in Death Valley. A two-stamp mill and cyanide plant will be erected. M. O. Hoyt, S. A. Overholtzer, O. L. Emery are interested.

STAMP MILL, TUNNEL.—Prescott, Ariz.—It is stated here that the Crown King Mines Co., G. F. Shurtleff, Gen. Mgr., proposes to install large stamp mill at the Crown King. It is also stated that plans have been completed for driving a 7,000-ft. tunnel.

MILL.—Bisbee, Ariz.—Local reports quote J. B. Tomlinson, principal owner of the Swansea mine, located 16 miles from Bacoachi, as stating that in four months the development work now in progress will be completed and a mill will then be erected on the property.

MINING TUNNEL.—Encampment, Wyo.—Dillon Consolidated Mining & Tunnel Co. has been incorporated and proposes to drive a 3,500-ft. tunnel, starting just north of the Dillon Townsite, and cross-cutting the formation from north to south. Clarence DeWitt, Dillon, Wyo., is Secy., and H. O. Granberg, Oshkosh, Wis., Vice-Pres.

MINING MILL.—Castleton, Utah.—Grouse Mountain Mining & Smelting Co., with principal office at Huntington, W. Va., has decided to raise $20,000 to be used for building a mill and for a working capital. The company has recently reached a vein of ore which has assayed quite well. W. R. Wheat, Castleton, is Supt. of Mines.

U. S. POSSESSIONS AND CUBA.

RESERVOIR.—Hawaii.—Honolulu reports state that an appropriation of $75,000 is provided in the Loan Act for Nuuanu Reservoir No. 4. This work is intended for a high level reservoir at some elevation above Luakaha Reservoir.

TUG BOAT.—Cuba.—Bids are asked by Department of Public Works, Jose Pujals, Ch. Engr. of Works of the Port of Havana, Arsenal of Havana, until Oct. 15 for furnishing a steel, single-screw tug boat of 200 to 250 I. H. P. for the dredging plant of that port.

RAILWAY EXTENSIONS.—Philippines.—Manila Ry. Co. announces that in order to finance extensions the company has entered into a provisional agreement with Speyer Bros., of New York, to take up $2,000,000 in 2½-year notes and 5,000 deferred shares carrying special voting powers.

ROAD WORK.—Hawaii.—Following bids were opened by Board Public Works, Honolulu, early in August for constructing the road from Keanae to Kailua, Maui: Wilson & Duggan, Sec. 1, $8,894; Sec. 2, $10,674; Sec. 3, $13,674. L. M. Whitehouse, Sec. 1, $14,294; Sec. 2, $15,589; Sec. 3, $13,533. John C. Picanco, Sec. 1, $10,774; Sec. 2, $18,274; Sec. 3, $13,774. A. A. Wilson, Sec. 2, $17,400. The work comprises the constructing of road, culverts, bridges and abutments.

ELECTRIC RAILWAY.—Porto Rico.—Advices from San Juan, P. R., state that the Porto Rico Railway, Light & Power Co., the assignees of the franchise granted to the Vandegrift Construction Co., of Philadelphia, to construct and operate an electric line to Ponce, have started work on their grading from Rio Piedras towards Caguas, passing near Trujillo Alto. The Executive Council has amended this franchise and the company is now allowed to pass through the town of Rio Piedras. The plans and profiles for the line from San Juan to a point between Caguas and Rio Piedras have been approved by the Bureau of Public Works. Roque Paniagua is the contractor for the grading.

WATERWORKS.—Philippines.—As was stated in our issue of Aug. 11, plans have been submitted to the Secretary of War for the proposed water and sewer systems for Manila. Major J. F. Case, Cy. Engr., of Manila, and Engineer in charge of the work, has been in New York City this week, being located at the Hotel Manhattan. A detailed estimate of the cost of the new water supply system is as follows:

Estimate for upper dam site.—15.7 miles of road, deposit to dam, at $2,000, $31,400. Upper storage reservoir. —Clearing and grubbing 311 acres, at $100, $31,100; stripping soil and covering with gravel, 60,000 cu. yds., at 30 cts., $18,000; lining near dam and stopping crevices in rock over area of 720,000 square feet, 13,000 cubic yards concrete, at $10, $130,000—$179,100. Dam.—Excavating 4,500 cu. yds. rock, at $2, $9,000; 16,000 cu. yds. concrete, at $10, $160,000; gate chamber and fittings, including sluices, screens, gates, etc., $15,000—$184,000. Pipe line. —14.3 miles steel-riveted pipe, 42-in. diameter, No. 6 B. W. G., 7,100,000 lbs., at 5 cts. laid, $355,000; 217,000 lbs. rivets, at 5 cts., $10,850—$365,850. Trench.—85,000 cu. yds. earth excavation, at 30 cts., $25,500; 28,000 cu. yds. dhobie rock, at $1.25, $35,000; 11,000 cu. yds. lime rock, at $2, $22,000—$82,500. Reservoir.—Excavating 210,000 cu. yds. dhobie rock, at $1, $210,000; embankment, 20,000 cu. yds., at 50 cts., $10,000; concrete lining, 2,000 cu. yds., at $10, $20,000; asphalt coating, 40,000 sq. yds., at 10 cts., $4,000; gate house and fittings, $20,000—$264,000. Tunnel.—6,000 lin. ft., at $12, $72,000; 14 air valves, 17 blow-offs, 34 manholes, 2 stand-pipes, $11,800; 200,000 brickwork, at $30 per 1,000, $6,000; iron trestles, 40,000 lbs., at 5 cts., $2,000; engineering and superintendence, $40,000—$59,800. Total, $1,238,600. Ten per cent. for contingencies, $123,860. Total for system from upper dam site, $1,362,460. Estimate for lower dam site.—14.1 miles of road, at $2,000, $28,200. Lower storage reservoir. —Clearing and grubbing 250 acres soil at $100, $25,000; stripping soil, etc., 60,000 cu. yds., at 30 cts., $18,000; concrete patching over 100,000 sq. ft., 37,000 cu. yds., at $10, $37,000—$80,000. Dam.—Excavation, 5,500 cu. yds. rock, at $2, $11,000; 43,270 cu. yds. concrete, at $10, $437,700; gate chamber and fittings, $15,000—$458,700. Pipe line—12.8 miles 48-in. steel riveted pipe, No. 6, 7,565,000 lbs., at 5 cts., $378,250; 211,000 lbs. rivets, at 5 cts., $10,550—$388,800. Trench.—92,500 cu. yds. earth, at 30 cts., $27,750; 30,000 cu. yds. dhobie rock, at $1.25, $37,500—$65,250. Reservoir (as before), $264,000. Tunnel. —7,000 lin. ft., at $12, $84,000; air valves, blow-offs, stand-pipes, etc., $12,000; 225,000 brickwork, at $20 per 1,000, $6,750; iron trestles, 40,000 lbs., at 5 cts., $2,000; engineering and superintendence, $40,000—$144,750. Total, $1,364,450; 10 per cent for contingencies, $136,445. Total for system from lower dam site, $1,500,895.

MEXICO.

RAILWAYS.

CHIHUAHUA.—It is reported that the Ferrocarril Mineral, the railroad which runs from this city to the Santa Eulalia mining camp, a distance of 15 miles, is to be changed from narrow to standard gage.

GUANACEVI, DURANGO.—The Parral & Durango railway is to be extended to the mining town of Guanacevi from its present terminus at the town of Mesa de Sandia, and engineers are now locating the line. The road is owned principally by Pittsburg capitalists. The president of the road is J. G. Gill; vice-president, S. H. Wilson, and the treasurer W. G. Muzzy, all of Pittsburg, Pa.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

LAS ESPERANZAS, COAHUILA.—Surveys for the proposed extension of the railroad of the Mexican Coal & Coke Co. from this place to Nogalitas, a distance of 24 miles, have been completed, and contract for grading let to Messrs. Hampson & Smith, City of Mexico. G. A. Stranahan is Chief Engr., Mexican Coal & Coke Co.

MONTEREY.—It is reported that the branch line of the National Railroad of Mexico which is now being built from this city to a connection with the road which runs from San Miguel to Matamoros will also be extended to a point on the Rio Grande border about four miles south of Rio Grande City, Texas, where it will connect with the Hidalgo branch of the St. Louis, Brownsville & Mexico R. R. It is probable that a joint bridge will be built over the Rio Grande.

STREET AND ELECTRIC RAILWAYS.

MONTEREY.—Monterey Electric Street Railway, Light & Power Co. recently organized with $2,000,000 capital, is stated to have purchased the Slayden street railway interests in Monterey, and will negotiate with the Empresa Mexicana Street Railway Co. and also with the owners of the Mackin & Dillon concession to construct electric lines. The company will probably begin within 60 or 90 days to construct the proposed electric-railway system in Monterey, and in all probability Mackin & Dillon will get the contracts. The Slayden lines have 12 miles and the Empresa Mexicana about 14 miles of track. Edward F. Walker, 170 Broadway, New York, is interested.

BUILDINGS.

MONTEREY.—Local reports state that J. T. Patrick has plans to build a large sanitarium at Del Rio, a short distance from Spofford on line of the S. P. R. R. It is thought the construction of a hotel and sanitarium will cost $200,000.

WATER-WORKS.

JALAPA, VERA CRUZ.—The Mexican Construction and Engineering Co. of the City of Mexico has secured a contract for water-works and sewerage systems for the cities of Jalapa and Cordoba.

MERIDA, YUTACAN.—Merida Yutacan Water Co. has been incorporated with $500,000 capital, "to take over the concession granted to William H. Walton, of New York City, by the municipality of Merida, State of Yutacan, Republic of Mexico, for a potable water service." William H. Walton and Francis M. Gardner, New York City, and Alfred N. Lewis, 174 Pennsylvania Ave., Newark, N. J., are interested.

MONTEREY.—Plans are stated to be progressing favorably for the establishment of water-works and sewers by the National Water-Works & Guarantee Co. of Scranton, Pa., under the concession granted them by the Governor of Nuevo Leon. It is said that the Legislature of that State will approve the contract about Sept. 15. Col. J. A. Robertson, Monterey, is Vice-Pres. and Resident Director of the company.

SEWERAGE.

CITY OF MEXICO.—The floating of a loan of $2,500,000, gold, by the Colonial Condesa, Mexico City, is being arranged, the money to be expended in improvements, including sewerage.

MANUFACTURING PLANTS.

CITY OF MEXICO.—The American Mutual Plantation Co. is said to be about to purchase equipment for a sugar plant to be built on the company's plantation, known as El Salto. The general offices of the company are at 108 La Salle St., Chicago, Ill.

CITY OF MEXICO.—Faustino Martinez, City of Mexico, has secured concession from the Mexican Government under which he is permitted to exploit some 1,700,000 acres of land in Quintana Roo territory, on the Yucatan Peninsula. The land is said to have quantities of mahogany, cedar, oak and pine. It is stated that considerable saw mill equipment will be purchased shortly in the United States.

GOMEZ PALACIO, DURANGO.—The Mexican Central Railroad Co. will, it is stated, soon commence the construction of the buildings for its new shops at this place. It is said that the shops will give employment to 500 or 600 workmen.

GUANAJUATO, GUANAJUATO.—The Dolores Mining Co., operating quicksilver mines, near the city of Guanajuato, is to install considerable new machinery. For information address Dwight Furness, City of Guanajuato.

MONTEREY.—Louis K. Freeze of this city is now negotiating for a large tract of timber land with a view of erecting a saw mill thereon.

PARRAL, CHIHUAHUA.—Pedro Alvarado, owner of the famous Palmilla mine, at Parral, has purchased the Tres Rosas mine, and, it is said, contemplates the establishment of large reduction works, and also a concentrating plant, at Jiminez for treating the ores from his various mines.

PARRAL.—It is stated that construction of independent smelting plant at this place is a strong probability. A. L. Rosser, Chihuahua, Mex., may be able to give information.

PEDRICENA, DURANGO.—The American-Mexico Mining & Development Co. will soon commence the construction of its smelter on the railroad from Pedricena, near Torreon.

SALINA CRUZ, OAXACA.—Antonio Gonzalez has been commissioned by the Department of Public Works as engineer to construct a large dike at the harbor of Salina Cruz.

SAN MIGUEL AMILANCO, DURANGO.—The Department of fomento has granted a concession to an American syndicate to exploit oil fields of San Miguel Amilanco. It is said three drilling rigs will be operated.

VERA CRUZ.—Percy N. Furber, care of Oil Fields of Mexico Co., 52 William St., New York City, is in the market for nine miles of 20-lb. rails, 8,000 2-in., wrought iron bolts and three or four flat cars and all other necessary equipment, save sleepers, for a mule tramway which it is proposed to build in Mexico. Mr. Furber is also in the market for five oil tanks of a capacity 50,000 bbls. each, and if the order proves satisfactory other tanks will be purchased to hold a total if 100,000 bbls. He is also in the market for 2,000 ft. 2-in. cast-iron piping, and will require an outfit for building two extra rigs, necessitating, among other things, two 25 HP. steel boilers complete, in sections, punched and ready to be put together; two 25 HP. drilling engines complete, with 11-in. × 12-in. cylinders; rubber belts, pulleys, nails, 2,000 ft. 2¼-in. Manila drilling cable, 1,000 ft. 1-in. Manila rope, drilling bits, jacks, tool wrenches, 500 ft. ⅝-in. steel chain, two derrick crane, bolts, machine bolts, washers, etc.

READERS' WANTS

This Department contains special requests, and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. **ENGINEERING NEWS** will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, **UNLESS OTHERWISE REQUESTED**, which request will be honored absolutely. The information **in all cases will be sent to our advertisers** handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.

PUMPING ENGINES.—Augusta, Me.—W. B. Getchell, Civil Engr., writes us that he is in the market for pumping engines.

EXPANDED METAL.—Buffalo, N. Y.—James P. Hunt, 3 Builders' Exchange, asks for the names and addresses of manufacturers and dealers of expanded metal.

PAVING CONTRACTORS.—Delaware City, Del.—Louis F. Garrard, Jr., Construct. Q. M., writes for the names and addresses of contractors who would bid on the construction of roads and sidewalks.

ELECTRIC LIGHTING.—Williamson, Mingo Co., W. Va.—Henry Mace Payne. Civil and Consult. Engr., writes us that he desires to hear from responsible parties concerning a lighting plant of about 16 or 18 c. p. lights and power for the same.

MATCH-BOX MACHINERY.—New York, N. Y.—Maldorado & Co., exporters, 16 Beaver St., New York, inform us that they want to get into communication with makers of match-box machinery, and of match-box printing machinery, for export.

PUMPING ENGINE.—Bridgeport, Conn.—The Bridgeport Hydraulic Co., Saml P. Senior, Supt., would like to hear from manufacturers of pumping engines of 10,000,000 gallons capacity. The head to be pumped against is 130 ft. and the force main 24-in. cast iron, 1 mile long.

ROLLING MILL MACHINERY, FURNACES.—New York.—The Victor Metals Co., 29 Broadway, desires catalogues of rolling mill machinery and furnaces for a rolling mill which it is erecting. This mill will be used for the manufacture of Victor Non-Corrosive Silver Metal into sheets and rods.

FOREIGN CONTRACTS—EXPORT NEWS.

WATER-WORKS.—South Africa.—East London, Cape Colony, ratepayers have voted in favor of a scheme for installing water-works at a cost of $135,000.

RAILWAY CONSTRUCTION.—South Africa.—The Southwestern Railway Co., Ltd., Cape Colony, has been authorized to construct a 2-ft. gage line from Knysna to Yzernek, 22 miles.

BATTLESHIPS.—England.—Japan is stated to have ordered two large battleships of a speed of 23 knots from Vickers, Maxim & Armstrong, London, in addition to the battleship already building there.

DOCKS, ETC.—Asia.—Tanjong Pagar Dock Co., Ltd., with headquarters at Singapore, Straits Settlements, proposes to spend about $2,500,000 for new developments on the company's property, including the construction of new harbor works.

DRAINAGE WORK.—South Africa.—Claremont, Cape Colony, Municipal Council has placed the matter of preparing plans and specifications for the construction of a drainage system at a reported cost of $200,000 in the hands of W. T. Oliver, Drainage Engr., Claremont.

WATER-WORKS IMPROVEMENTS.—South Africa.—The Natal legislative assembly has been asked to pass an act authorizing the town of Ladysmith to issue the sum of $170,327 in bonds, in order to make certain needed improvements in the municipal water-works.

ELECTRIC RAILWAY.—Panama.—An American syndicate has applied to the Government of Panama for a concession and full right of way privileges for the immediate construction and operation of an electric railway from the city of Panama to the suburban resort of La Savanna.

RAILWAY.—Japan.—The building of a branch line from Usa, on the Kiushiu Railway, to Oita City, 40 miles, has been officially sanctioned, as has a short line of 1¼ miles from Kawasaki station, on the same company's line, to the coal-mining district of Taito, in Fukuoka Prefecture.

DREDGING MACHINES.—Argentina.—It is reported that the Compania de Sutphen de Lavaderos de Oros, of Buenos Aires, contemplates buying additional dredging machines, to be used upon works for which it has recently received orders. E. W. Sutphen, Buenos Aires, Argentina, is the head engineer of the company.

BATTLESHIPS.—England.—The Admiralty, according to reports at hand, has invited the Clyde shipbuilders to submit bids for two battleships of 16,500 tons and high speed. It is said that these vessels in the matter of armament and armor protection will eclipse anything yet attempted. Bids are to be received until Sept. 9.

PORT IMPROVEMENT.—Chili.—In his message to the Chilean Congress, May 31, President Riesco stated that the deliverance of its finances from the burden of armed peace and the sale of the Chilean warships had enabled the government to realize a considerable surplus which would be employed in improving the ports of the country.

STREET IMPROVEMENTS, DRAINAGE.—South Africa.—Town of Woodstock, Cape Colony, proposes to borrow $1,300,000 for certain public improvements, the most important of which are the construction of streets and the carrying out of a scheme of surface drainage. The matter was to come up at a meeting of the ratepayers Aug. 8.

RAILWAY.—Costa Rica.—Costa Rican Congress has established the terminal port of the Costa Rican Pacific Ry. at Puntarenas, repealing the law authorizing the establishment of the terminal port at Tivives. About 15 miles of railway will have to be constructed to connect San Domingo with the railway between Esparta and Puntarenas.

SHIPS.—Russia.—Lewis Nixon, of New York City, has taken a contract to build for the Russian Government, under the direction of the Department of Mercantile Marine, a fleet of ships of large capacity. These will be constructed on the Black Sea, and, it is believed, at the yards of the Government at Sebastopol. The work is to begin next winter.

WATER-WORKS, SEWERAGE.—Peru.—A. M. Gottschalk, U. S. Consul, Callao, Peru, reports that the Minister of Public Works has been authorized to select a person experienced in engineering work to inspect the ground and report on the cost of water supply and sewerage for the town of Iquitos. The minister can be addressed at the Palace de Gobierno, Lima, Peru.

SEWERAGE, ETC.—Roumania.—The city authorities of Botoshani, a place of about 32,000 inhabitants in the province of Botoshani, Roumania, have received permission to expend the sum of $141,276 upon its sewerage system, and $39,372 for building and equipping a fire-engine house and making certain improvements upon the city hall.

LAND CONCESSION.—Brazil.—A concession covering about 20,000 sq. miles of land in the State of Maranhoo has been granted to Rudolph Seyler, 551 West 125th St., New York. The concession covers a strip extending 100 miles along the ocean and 300 miles back from the coast. It is intended to colonize the region, which is said to contain rich gold, silver and copper deposits. Mr. Seyler has confirmed the above report and states that further information will be given out in a few days.

SEWERAGE, ETC.—South Africa.—An appropriation of about $5,000,000 is stated to have been provided for public works in Johannesburg for the next financial year, 1905-6, to be spent for the following improvements: Tramways, permanent way and buildings, $1,540,000; lighting and tramway project, $1,450,000; sanitary sewerage in the southwestern district $620,000; storm water drainage, $635,000; road construction, $310,000; rehousing in the expropriated area, $169,400; location at Klipspruit, $50,000; laying out the Milner Park, $50,000, and sundries, $175,600.

IRRIGATION AND RAILROADS.—Egypt.—According to Blue Book issued by the English Foreign Office the irrigation and railroad schemes suggested by Sir William Garstin for Egypt represent an estimated expenditure of about $107,000,000, of which about $65,000,000 will be used in the development of the Soudan and about $40,000,000 in the development of Egypt. It is probable that the greater part of the work will be postponed for some time, but Lord Cromer, British Minister and Consul-General in Egypt states that about $27,000,000 should be utilized at an early date in canals for Egypt, in raising the Assouan dam, in the completion of the Suakim-Berber Railroad and other developments of the country which will largely increase the revenue from taxes.

WHARF.—Brazil.—The contract of Dec. 17, 1892, between the Brazilian Government and the Companhia Brazileira Torrens, has been altered, and provides for the construction of a solid masonry wharf 1,000 meters long at the port of Victoria, state of Espirito Santo. The wharf will be provided with warehouses and sheds for the storage of merchandise, and these will be connected with the railways of the city by tramways. The harbor throughout the whole area comprised between the wharf and city of Victoria is to be dredged to a depth of 9 meters, and a canal having a minimum width and depth of 150 meters and 9 meters, respectively, is to be opened and maintained, extending to the entrance of the port. Buoys and lights are to be placed where needed, and a bridge built at a point to be decided on later, which will connect the city of Victoria with the mainland.

DOCKS, MOLES AND FORTS.—Chili.—Tenders are to be opened by Chilean Government, Santiago de Chili, Nov. 10 for building docks, moles and forts at Talcahuano, to cost about $1,825,000. Talcahuano is situated on the coast of Chili, near Concepcion, and about 275 miles south of Valparaiso. It is at the base of a narrow peninsula jutting north and sheltering the port from the west. There are no docks. The port stands on a bay looking north, with two entrances, divided by Quiriquina Island. Vessels anchor near the shore and load and discharge their cargoes by means of lighters. Concepcion is a seaport, near the mouth of the Biobio, and is connected by rail with the port of Talcahuano. Concepcion Bay is about five miles wide and has an entrance on either side of Quirquina Island. It receives the Biobio River and affords good anchorage.

HARBOR WORK.—Para, Brazil.—Capt. Arthur Schindelar, of Para, who is on a visit to the U. S. in regard to work in connection with improvements to be made to the harbor at Para, writes us that he wishes to get into communication at once with contractors and others who are prepared to make the improvements, and to finance the same. The work will cost about $3,000,000. This harbor commands the greatest fluvial trade and an extensive ocean traffic. The port of Belem (Para) is the most important rubber center in the world. By way of this harbor the majority of the trade for the Amazon district will pass. [illegible]is is about the last of the great South American harbors [illegible]hat have not yet been developed and improved. American capitalists and others interested in such works have never as yet taken up such matters with Brazil, the majority of harbor work being controlled by Germans. Captain Schindelar may be addressed care of the Hotel St. George, Brooklyn, N. Y.

MINING NOTES.—France.—Our correspondent in Brussels sends us the following items concerning mining developments in France and Spain: France, Oise.—Mr. F. Carchereux, of Ravenel, Canton of Saint-Just-en-Chaussee, arrondissement of Clermont (Oise), has asked for a concession of the lignite territories of the communes of Sermaize, Porquericourt, Vauchelles, Suzoy, Ville, Larbroye, Pont l'Eveque, Passel and Noyan, arrondissement of Compiegne.

Spain.—La Societe des Mines de Plomb Argentifere de Garlitos (El Barrachs) has been formed, with headquarters at Brussels, for the exploitation of a concession of 316 hectares of argentiferous lead mines, situated in the province of Badajoz (Spain). The capital is fixed at $400,000.

France.—La Compagnie Francaise des Mines du Liat has just been formed to exploit the well-known blende mines of the district of Liat. The headquarters are at 16, Rue d'Abbeville, Paris, and the first Council is formed of Messrs. Leclanche, Germot, Sanguinetti and Tuteur.

France, Morbihan.—Mr. E. Morineau, 94 Boulevard Raspail, has solicited a concession of the tin and metal mines on the territory of the communes of Penestin and Billiers, arrondissements of Vannes.

France, Haute-Saone.—Mr. Camille Simonin, 19 Quai Isabey, Nancy, has solicited a concession of the manganese and metal mines on the territories of the communes of Faucogney, Esmoulieres and Amont, arrondissement of Lure, department of Haute-Saone.

France, Nord and Pas-de-Calais.—By a petition of May 16, 1901, the Societe des Acieres de Micheville and the Societe des Hauts Fourneaux et Fond de Pont-a-Mousson, solicit conjointly the concession of the coal mines on the territories of a large number of communes.

RAILROAD SUPPLIES.—Portugal.—J. H. Thi[illegible]t, U. S. Consul at Lisbon, offers the following information and suggestions for parties desirous of bidding for supply of material for the railway systems of Portugal:

"The lines of railway at present open for traffic have a total length of 1,553 miles, and are operated by four companies. Extensions of the several systems are in progress. Tenders are not, as a rule, publicly invited for rails, engines, and rolling stock, but when these are required the company interested invites the firms on its list to send tenders for what it needs. The first step, then, for a firm desirous of being invited to tender is [illegible] get its name and address registered in the office of the company. This should be done by a formal application, setting forth the capabilities of the firm or individual desirous of an opportunity to tender, the nature of the material which can be furnished, and such other information [illegible] seem desirable. The French language is well understood in all the chief offices, and while recommending the use of that language, I am not prepared to say that English would not do almost as well. In furnishing calculations of length and weight the metric system should be used. Having lately had occasion to make an inquiry in regard to steel rails on behalf of a correspondent, I was asked whether he had an agent in this country, and I gathered from the manner of the official from whom I made the inquiry that it would be of advantage to anyone in the United States tendering to have an agent at hand in this country. The titles and addresses of the four companies are as follows, and strict adherence to them is urged to insure correct delivery, which would be rendered more certain by registering the application: (1) O Presidente do Concelho d'Administracao da Companhia Real dos Caminhos de Ferro, Rocio, Lisbon, Portugal; (2) Marquez de Gouveia, Director da Companhia dos Caminhos de Ferro da Beira Alta, 1 Rua Victor Cordon, Lisbon, Portugal; (3) O Presidente do Concelho d'Administracao dos Caminhos de Ferro do Estado, Ministerio das Obras Publicas, Lisbon, Portugal; (4) O Presidente do Concelho d'Administracao da Companhia Nacional dos Caminhos de Ferro, 88 Rua S. Nicolau, Lisbon, Portugal. There is another company working a narrow-gage railway, 40 miles long, between Porto and Povoa de Varsim, etc., whose address in full is O Presidente do Concelho da Companhia do Porto a Povoa e Famalicao, Boa Vista, Porto, Portugal."

ARGENTINA.

TANNERIES.—Buenos Aires.—The Argentina Tanning Co. has been incorporated with a capital of $100,000, to establish tanneries in various parts of this republic. F. C. Cook is Pres., and A. Monch, F. J. Cook and W. Atherton, Directors.

PORT.—Buenos Aires.—It is reported that the national Government is ready to sign a contract with the Santa Fe Government for the construction of a port in the capital of that Province which will cost some five or six millions gold. No tenders have been invited as yet.

RAILWAYS.—Buenos Aires.—The surveys and studies of the 140 Kilometres of new line projected between Sabanas and Barranqueras, which is in front of Corrientes, have been completed, and the Santa Fe Ry. Co. await their approval by the National Government in order to commence work. This new line is to be constructed within a year.

RAILWAYS, SANITARY WORKS.—Buenos Aires.—At a cabinet meeting held July 4 it was decided that the construction of the following works should be continued: Railways to Dolores, the Chaco, Bolivia, Guachipas, Ledesma and San Juan (from Serrezuela); Ports at Gualeguaychu, Parana, Conception and Colastine; the sanitary works authorized to be executed in the capitals of twelve of the provinces.

RAILWAYS.—Buenos Aires.—Messrs C. de Bruyu and R. Atamendi, representatives of the French Railway Co. of Santa Fe, are about to apply to Congress in their own name for a concession for a network of narrow gage railway in the Province of Buenos Aires, comprising the following sections: North section, from Buenos Aires to Rosario. West section, from Buenos Aires to General Villegas. Southwest section, from General Villegas to a point of intersection with the Western Railway between Zauja and Carhue. South section, from Buenos Aires to Bahia Blanca. East section, from Buenos Aires to La Plata. Plans are to be made and presented within two years and work to commence within six months of approval of same. The concessionaires would have the right to the following branches, from Salto to the Parana via Arrecifes, and from Salto to a junction with the west section via Chacabuco and Bragado. From Mercedes to the Parana, near Campana. From a point on the line between Pergamino and Rosario to Vedia, branches to Chivilcoy and 25 de Mayo, and to Bolivar, Lobos, General Alvear, Tapalque, Alavarria, Jaurez, Laprida, Pringles, Tres Arroyas, and the military port. Also a branch at the central produce market and Dock Sur. They would also have a right of access to the City of Buenos Aires and build a terminus in Buenos Aires, with right of junction with the port rails. They would moreover have the right during 20 years of prolonging their rails. They have at their command 186 million francs. The entire distance of all lines will be about 3,000 kilometres or 1,800 English miles.

It is also reported that Mr. Duncan Munro, Gen. Mgr. Cordoba & Rosario Ry., has already secured a concession for a meter gage line from Buenos Aires to Rosario. This concession offers more or less the same advantages as does the first scheme, and could even be made into a double-track railway if circumstances called for such increase. Mr. Munro is only awaiting the settlement of details with the Government when he will leave for England with a view to purchasing materials and commencing work forthwith.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

RESURFACING STREETS.—Dayton, O.—Following bids were received Aug. 12 for resurfacing streets, those given below being for entire work; Warren Bros. Co. also bid on resurfacing with bitulithic, their bid being $1.63 per sq. yd. for material and same price for labor:

Bidders.	Re-surfacing Asphalt, per sq. yd.		—Concrete— Foundation, per sq. yd.		
	Mat'l	Labor	Mat'l	Labor	Total.
Kirchner Cons. Co......	$1.00	$0.46	$0.36	$0.30	$34,835
Blake Asph. Maint. Co.	.90	.65	.10	.10	36,881
Cain Construction Co...	1.00	.55	.25	.25	36,942
Warren Bros. Co.........	1.57	1.57	.75	.75	37,468
Warren Bros. Co.........	....	....	.75	.75	38,894
J. S. Jackson.............	1.00	.61	.30	.40	38,409
Barber Asphalt Co......	1.63	1.63	.65	.65	38,874

VESSEL YARD.—Duluth, Minn.—Following bids were received by Capt. Chas. L. Potter, U. S. Engrs., Aug. 8 for building vessel yard at Duluth; (1) Total bid for building pier and bulkhead, dredging, etc.; (2) for rock filling in pier and rip-rap around pier, bid per cord in place, 100 cords required; (3) for rip-rap placed at north end of vessel yard, 10 cords required; (4) total:

Bids received at Duluth, Minn., Aug. 8, 1904, for Building Vessel Yard.

Bidders.	(1)	(2)	(3)	(4)
Wh[illegible]y Bros. Co., Superior, Wis.	$15,991.00	$6.00	$8.00	$16,671.00
Th[illegible] Nauffts, Duluth, Minn.	21,500.00	7.50	7.50	22,325.00
San[illegible] Preston, Duluth, Minn.	20,500.00	6.00	8.00	21,180.00
J. F. [illegible]hleunes & Co., Duluth, Minn.	17;326.00	5.50	5.50	17,931.00
Pow[illegible] & Mitchell, Marquette, Mich.	19,964.00	7.20	14.40	20,828.00
L. D. Campbell & Co., Duluth, Minn.	16,976.00	6.50	6.50	17,691.00
Sch[illegible]dt Bros., Superior, Wis.	19,964.00	12.00	10.00	21,264.00
Fra[illegible]kman & Morris, St. Paul, Minn	20,800.00	7.00	7.00	21,570.00

GRADING, TURFING, ETC.—Oswego, N. Y.—Following bids were received by Capt. W. M. Coulling, Q. M., U. S. A., Aug. 11 for grading, forming terrace and turfing, and grass seeding at Fort Ontario:

Bids received at Oswego, N. Y., August 11, 1904, for Grading, Forming Terrace, Turfing, etc., at Fort Ontario.

Bidders.	Grading, Turfing and Terracing.	Grass Seeding.	Earth Excavation, per cu. yd.	Rock Excavation.	Grass Seeding, per acre.	Turfing, per sq. yd.
J. J. Fitzpatrick, Plattsburgh, N. Y	$45,070.00	$480.00	$0.43	$2.40	$12.00	$0.45
C. A. Miner, Philadelphia, Pa.	48,964.00	320.00	.46½	3.00	8.00	6c. sq. ft.
Mosier & Summers, Buffalo, N. Y	38,650.00	4,000.00	.37½	3.00	100.00	.25
Chas. A. Schutrum, Buffalo, N. Y	37,840.00	1,000.00	.36	3.00	25.00	.40

REGULATING AND GRADING—New York, N. Y.—Following bids were received by Bronx Borough President Aug. 4 for regulating, grading, etc., on Tremont Ave.; (1) D. W. Moran; (2) Geo. I. Bailey; (3) J. C. Rodgers, 326 Lenox Ave., New York; (4) W. F. Murray, 1186 Jackson Ave., New York; (5) F. V. Smith Construction Co., 147 East 125th St., New York; (6) M. J. Leahy, 990 East 156th St., New York:

Bids received at New York, N. Y., August 4, 1904, for Regulating, Grading, etc., on Tremont Ave.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)
Earth excavation	25,000 cu. yds.	$0.30	$0.90	$0.40	$1.20	$0.20	$0.50
Rock	14,300 "	1.65	2.70	1.40	1.50	1.30	1.00
Filling	136,000 "	.65	.40	.40	.69	.40	.70
New curb	16,900 lin. ft.	.85	1.00	.75	.99	.75	.95
New flag	60,000 sq. ft.	.28	.30	.25	.28	.26	.24
Cast iron inlet frames	10,000 lbs.	.11	.05	.05	.08	.05	.10
New bridge	33,500 sq. ft.	.55	.55	.55	.65	.60	.75
Dry rubble	3,000 cu. yds.	2.00	1.50	2.00	2.00	2.00	2.00
Rubble in mortar	125 cu. yds.	7.00	8.00	5.00	5.50	5.00	4.00
12-in. pipe	900 lin. ft.	5.90	2.50	4.00	3.75	4.00	3.00
18-in. pipe	2,150 "	7.50	3.00	5.00	4.50	5.00	4.00
Lumber	1,000 ft. B. M.	50.00	25.00	50.00	38.00	50.00	40.00
Concrete	120 cu. yds.	6.00	10.00	8.00	5.50	6.50	6.00
Steel rods in place	10,000 lbs.	.06	.10	.10	.09	.05	.10
Totals		$198,875	$185,310	$153,555	$222,011	$148,720	$197,240

REGULATING, GRADING, ETC.—New York, N. Y.—Following bids were received by Bronx Borough President Aug. 4 for regulating and grading, setting curbstones, flagging, laying crosswalks, building approaches and placing fences on Walton Ave.; (1) D. W. Moran, 563 Echo Pl., New York; (2) Geo. I. Bailey, 2123 Boston Road, New York; (3) Uvalde Asphalt Co., 1 Broadway, New York; (4) Arthur J. Collins, Fordham, N. Y.; (5) P. J. Duffy, 132d St. and St. Ann's Ave., New York:

Bids received at New York, N. Y., August 4, 1904, for Regulating, Grading, etc., on Walton Ave.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)
Earth excavation	12,400 cu. yds.	$0.27	$0.84	$1.00	$0.60	$0.60
Rock	11,130 sq. ft.	1.65	1.83	1.00	1.60	.60
Filling	61,200 "	.41	.15	.25	.40	.60
New curb	16,250 lin. ft.	1.00	.85	.82	1.00	.70
New flag	64,100 sq. ft.	.34	.23	.30	.25	.24
New bridge	6,400 "	.55	.60	.60	.60	.55
Dry rubble	1,610 cu. yds.	1.00	1.50	1.25	2.00	1.00
Lumber	3,000 ft. B.M.	30.00	20.00	......	......	1.00
Totals		$90,068	$74,834	$77,237	$89,063	$82,730

INDUSTRIAL NOTES.

OUR READERS are requested to send short notes regarding new contracts that they are about to award, or have secured, for our news columns. Changes in firms' names and addresses are also wanted. "Write-ups" will not be inserted under any circumstances, as notes must contain news of interest to our readers. If our readers are in the market for any kind of machinery, tools, etc., we shall be glad to send them names of responsible firms making what they want.

THE CONTRACTORS' SUPPLY & EQUIPMENT CO., of Chicago, reports that its business is good and growing, especially in the line of concrete mixing machines.

THE FOUNDATION & CONTRACTING CO., 35 Nassau St., N. Y., announce that on and after Aug. 20 the name of the company will be changed to the Foundation Co. No other change of any kind, either in the policy or the personnel of the company, has taken place.

W. B. CALDWELL CO., Louisville, Ky., states that for the last six or eight months the business of the company has increased instead of decreased, and right along their new orders have been a little more numerous than those of last year, which was the most prosperous that the company had had in a quarter of a century.

THE BULLOCK ELECTRIC MFG. CO., of Cincinnati, O., announces that at the meeting held July 30 Mr. W. H. Whiteside, General Manager of Sales of the Allis-Chalmers Co., was appointed General Manager of Sales of its company, so that he will have entire charge of the Sales Department of both the Allis-Chalmers and Bullock organizations.

THE B. F. STURTEVANT CO., of Boston, is fitting up quarters in its plant to be used for a nemergency hospital, in case of accident to employees. It is to be equipped with all the appliances known to medical and surgical science for the proper care of the men who may get injured in the discharge of their duties, until they can be removed to their homes. A graduate nurse and medical student will be in charge and a local doctor will attend to all surgical cases.

THE POWER & MINING MACHINERY CO., New York, started business a little over a year ago, having secured the works of the Holthoff Mining Machinery Co., at Milwaukee, where it immediately commenced extensive improvements for the manufacturing of its gas machinery. The extension of these works was begun in August, 1903, less than one year ago, and the same are hardly completed, but will be ready within 60 days for extensive operations. In the meantime the company has taken upwards of a million dollars worth of orders for Loomis-Pettibone gas apparatus and Crossley gas engines, which are being constructed in their shops at the present time. These orders have been placed among the following: Velardena Mining & Smelting Co., Velardena, Durango, Mex.; F. W. Snow, Hillburn, N. Y.; Gould Coupler Co., Depew, N. Y.; D. Lovejoy & Son, Lowell, Mass.; Ramapo Iron Works, Hillburn, N. Y.; Pennsylvania Steel Co., Steelton, Pa.; Dufresne & Locke, Montreal, P. Q., Can.; Milford Electric Light Co., Milford, N. H.; Motor Engine Co., 15 William St., New York; Taylor Mfg. Co., Columbia, S. C.; Potosina Electric Co., San Luis Potosi, S. L. P., Mex.; Amparo Mining Co., Drexel Bldg., Philadelphia; International Steam Pump Co., 114 Liberty St., New York; Atha Tool Co., Newark, N. J.; Elmira Water, Light & R. R. Co., Elmira, N. Y.; Sayles' Bleacheries, Saylesville, R. I.; W. H. Cone, Berlin, Ont., Can.; Bay State Forge, Cambridge, Mass.; Newton Gas & Electric Co., Newton, N. J.; Lexington Railway Co., Lexington, Ky.; Wellington Meat Export Co., Lim., Wellington, N. Z.; Avino Mines of Mexico, Ltd., Avino, Durango, Mex.; Phelps-Dodge Co. (Montezuma Copper Co.), Nacozari, Sonora, Mex., and others.

THE NATIONAL ELECTRIC CO., Milwaukee, Wis., has an exhibit in the Electricity Building at the St. Louis exhibition. There are motor-driven generators of 60 to 400 KW., stationary and portable air compressors and the Christensen air-brake system for electric railways, which is now fitted to some 11,000 cars in this country and 1,500 cars abroad. In the Machinery Building is one of the National Co.'s three-phase, 25-cycle alternating current generators of 1,500 KW., 6,600 volts, directly connected to a vertical cross-compound engine of 2,250 HP., and running at 85 revolutions per minute.

THE C. O. BARTLETT & SNOW CO., Cleveland, O., informs us that the following orders have recently been received: From the city of Winnipeg, Manitoba, 1 4-compartment direct heat rotary dryer; capacity, 100 tons of sand per day. The Silver Cup Mines (Ltd.), Ferguson, E. C., 1 single cylinder direct heat rotary dryer, using the waste heat from the ore roasters; cap., 50 tons of slimes per day. James Kirk & Co., Chicago, Ill., 1 steam dryer. The Washington Carbon Co. for a complete outfit, conveying and elevating machinery, for their new plant at Wellsville, W. Va. The Semi-Steel Co., Cleveland, O., elevating and conveying machinery for large brick plant to be erected at St. Paul, Minn.

THE NATIONAL WOOD PIPE Co., of Los Angeles, Cal., has just completed a pipe line 1,500 ft. long and almost 5 ft. in diameter. It connects the head of the main Imperial Valley irrigating ditch, which drains its water from the Colorado River. at Yuma, with the new power house of the Holton Power & Electric Co. The line consists of two parallel lines of continuous wood-stave pipe, 5 ft. in diameter at the mouth and 52 ins. throughout the remainder of its length. Both divisions are built of long redwood staves, held together by ½-in. steel bands, and the staves are fitted tongue and groove fashion end to end, the ends of the steel bands being clamped in grooved iron shoes. A second one was begun recently in Washington, near Walla Walla. The pipe is to be 5 miles long, connecting the Walla Walla River with rich, but now arid land, under the mountains to the eastward. The manner of building is to be identical with the method employed in the Imperial Valley. The line is being constructed for the Washington & Oregon Power Co., of Walla Walla. It will take four months at the very least to complete it, and when finished will have taken 1,000,000 ft. of lumber, 400,000 lbs. of steel bands and 50,000 lbs. of iron shoes which hold the bands solid. An item of interest in relation to this big work is that the National Wood Pipe Co. sent a number of Los Angeles college graduates up to Walla Walla to work on the line. Their applications for summer vacation jobs competed favorably with the many others received, and the boys were shipped out to where they can have a splendid open air camp experience as well as earn next year's college money. Two of the group were Stanford men. The company is also engaged in installing the entire pipe system, consisting of 4 to 10-in. patent, machine banded, redwood, water pipe for the new town of Stirling, in Butte County, No. Cal., under contract with the Diamond Match Co., of New York. The Diamond Match Co. has acquired large timber tracts, and is putting in an immense plant, and building a new town at Stirling City. A few months ago the town of Silverton, Colo., was supplied with several miles of 10-in. patent, machine banded, redwood water pipe for a pressure of 200 and 300 ft. head. This pipe is now used for bringing in the new water supply for the town, which is under municipal ownership. In January of this year the Cleburne Water, Ice & Lighting Co., Cleburne, Tex., was supplied with several miles of 4 to 8-in. patent, machine banded, redwood water pipe for a pressure of 300 ft. for use in connection with the domestic water supply of that town.

THE ALLIS-CHALMERS CO., of Chicago, Ill., announces that up in the Mining Gulch at the World's Fair in St. Louis there are now being completed two exhibits which perhaps equal any in the fair for interesting features, while standing far above the most in permanent value. These are the coal testing plant of the United States Geological Survey and the timber preserving plant of the Bureau of Forestry. Each plant will depend for its operation or value largely upon Allis-Chalmers Co.'s machinery, in each case loaned without pay by the company. The work of the coal testing plant will be the determination of the respective fuel values of every grade of coal which may be submitted. A 250-HP. horizontal Allis-Chalmers engine in this plant will not only supply power for the various mechanical operations to which the samples of coal will be subjected, but will also serve to give practical tests through its power-producing qualities of the actual values of the various coals. The samples of coal will be analyzed, burnt under boilers varied conditions, coked and used for gas producing. Their values for gas production and the power qualities of the gases will be tested in a gas engine. Records of every test will be kept and it is believed that before the fair is over data will have been secured which may result in the early development of several new coal fields in the country. The timber preserving plant which stands about a hundred yards further up the gulch than the coal testing plant, is under the direction of Dr. H. Van Schrenk, of the Shaw Gardens, St. Louis. Its special work will be to test all the various methods offered for preserving railroad ties. For this purpose the Allis-Chalmers Co. has lent, free of charge, a tie-treating retort and two tanks for the preservative solutions. Practically all the methods which are now in use for preserving railroad ties and other timber from rotting when exposed to earth and weather are alike in the treatment and differ only in the preservatives employed. The system supplied by the Allis-Chalmers retorts and tanks consists in placing the ties in the retort where the first operation is to dry out all of the water and sap by heat and exhaust all of this and the greater part of the air from the retort proper pumps. Then while the pores of the wood are all open and practically free from vapor, moisture or air the preservative mixture is let into the retort from the tanks. The preservatives are thus, under the influence of the vacuum in the pores of the wood, carried into every part of the ties or timbers, no matter how thick or long they may be. The great need of finding some process for making timber for railroad ties last in the ground beyond its natural life comes from the practical exhaustion of the country of its supply of such good timbers as white oak for this use. Railroads must to-day use timber of such kind as they can get for ties, and much of this is of a very inferior quality. In order to protect these poorer classes of ties from early decay many methods of preservative treatment have been devised and almost every one has shown good results under certain conditions. At the plant now established in the gulch it is intended to treat various lots of ties by various processes. Each batch of ties will then be put into regular service in some railroad track and a record kept of each tie until it is worn out or rotted out. As these tests and records will be official, they will of necessity carry great weight with them.

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TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

AIR COMPRESSORS.—The Ingersoll-Sergeant Drill Co., 26 Cortlandt St., New York. 7 × 10 ins.; pp. 72.

The greater portion of this catalogue is taken up with illustrations of the different types of air compressors and tabular data relating thereto. At the close of the catalogue will be found valuable diagrams and tables of interest to those designing compressed air plants.

AIR COMPRESSORS.—National Electric Co., Milwaukee, Wis. 6 × 9 ins.; pp. 12.

Compressors driven by electric motors are illustrated and described in this catalogue. One interesting illustration shows a portable compressor mounted on trucks. Tables give the dimensions, capacities and other data relating to motor-driven air compressors.

GAS AND OIL ENGINES.—August Mietz, 128-138 Mott St., New York. 6 × 9 ins.; pp. 22.

A large number of testimonial letters are given in this catalogue, showing the wide range of usefulness of gas and oil engines made by this firm. Illustrations and line cuts show the design of the different types of engines, and tables give weights, sizes, horse-power, etc.

UNIVERSAL PIPE FOR GAS AND WATER.—Central Foundry Co., 116 Nassau St., New York City. Paper; 7 × 10 ins.; pp. 55; illustrated.

THE LEAKY JOINT PROBLEM AND HOW SOLVED.—As above. pp. 34.

The so-called universal pipe and fittings are of cast-iron and have as their special feature hub and socket joints made tight by means of flanges and bolts. The first of these pamphlets describes pipe and fittings and other gas and water-works supplies, and quotes prices of the same. The second pamphlet opens with a report on leakage from water and gas mains made to the publishers of the pamphlet by Mr. James C. Bayles, Consulting Engineer. Then follows an extract from a report by Mr. Dexter Brackett, on water waste in the Boston metropolitan district. Finally, letters of testimonials and reproductions of photographs showing the pipe laid in trenches or beneath bridges are given.

REDWOOD TANKS.—Redwood Manufacturing Co., 8 California St., San Francisco, Cal. 6 x 9 ins.; pp. 70.

This catalogue contains a general description of the redwood tanks made by this company, together with directions for setting up tanks, tables of capacity, size, weight, prices, etc. Filter bottoms for leaching tanks, redwood precipitating boxes, zinc lathes and other cyanide plant accessories are illustrated and described.

PILE-DRIVING MACHINES AND OUTFIT.—Vulcan Iron Works, Chicago, Ill. Two catalogues, 5 x 6½ ins.; pp. 35 and 20.

The smaller catalogue describes the Warrington steam pile hammer and illustrates its use, a large number of testimonial letters being given as to its efficiency. The larger catalogue shows pile drivers of the ordinary type, pile driver engines, nippers, hammers, pile shoes and bands.

COAL POCKETS.—The Link Belt Engineering Co., Philadelphia, Pa. 6 x 9 ins.; pp. 32.

The economic advantages of retail coal pockets are set forth, followed by photographs showing installations made by this company. Line cuts show cross-sections of plans of coal elevating, screening and storage plants installed in different cities. Locomotive cranes with clam-shell buckets, and types of belt unloaders, are illustrated.

SEWER CLEANING MACHINES.—P. J. Healey, 10 Tremont St., Boston, Mass. Paper; pp. 10; illustrated.

This machine consists of a shovel, mounted on and in front of a small truck. By a proper system of ropes the shovel is moved forward until loaded, then drawn back to a manhole for emptying. Mr. Healy, the inventor, was formerly connected with the metropolitan sewerage system at Boston and also with the Boston sewer department.

STEAM ENGINES.—I. & E. Greenwald Co., Cincinnati, O., Paper; oblong; 9¾ x 6¼ ins.; pp. 73; illustrated.

The Greenwald engines are four-valve engines, with gridiron valves, the steam valves being at the side and the exhaust valves beneath the cylinders. They are built as simple, cross-compound and tandem compound engines, in large and small sizes. Several pages are [illegible] by testimonials and a list of purchasers.

DISINTEGRATORS AND PULVERIZERS.—E[illegible] Stroud & Co., 30-36 La Salle St., Chicago, Ill. 7 [illegible] ins.; pp. 64.

The Cyclone Mills for grinding and pulverizing [illegible] very fully illustrated by photographs and line cuts and are thoroughly described in the text. Tables are given of the dimensions, weights, horse-power required, etc., [illegible] by a list of some of the users of these mills.

REMOVAL OF CRIBS.

Cleveland, O., Aug. 15, 1904.

Sealed proposals will be received at the office of the Secretary of the Board of Public Service, No. 105 City Hall, until 12 o'clock m., September 13, 1904, for the removal of two temporary cribs located in Lake Erie, belonging to the Water-Works of the Board of Public Service.

Specifications may be seen and blank proposals can be obtained at the office of the Superintendent of Water-Works.

Each proposal must contain the full name of the party or parties making the same, and all persons interested therein, and must be accompanied by a certified check for Two Thousand ($2,000) Dollars, payable to the Board of Public Service, on a solvent bank in the City, as surety that if the proposal be accepted a contract will be entered into.

No proposal will be entertained unless made on the blanks furnished by the Superintendent of Water-Works and delivered at the office of the Secretary of the Board of Public Service, No. 105 City Hall, previous to 12 o'clock m., on the day specified.

The City reserves the right to reject any o all bids.

THE BOARD OF PUBLIC SERVICE,
By W. J. Springborn, President.
A. R. CALLOW,
7-3t Secretary the Board of Public Service

DEPARTMENT OF THE INTERIOR, U. S Geological Survey, Reclamation Service, Washington, D. C., August 16, 1904.—Sealed proposals, in duplicate, will be received until 10 o'clock a. m., September 22, 1904, at the office of the U. S. Reclamation Service, Chamber of Commerce Building, Denver, Colo., for the construction and completion of a telephone system about twenty-eight miles in length, in connection with the Uncompahgre Valley Reclamation Project, near Montrose, Colorado. Specifications, forms of proposal, and particulars may be obtained after August 20, 1904, by applying to A. L Fellows, U. S. Geological Survey, Chamber of Commerce Building, Denver, Colo., to the Engineer of the United States Reclamation Service, Montrose, Colo., or to the Chief Engineer of the U. S. Reclamation Service, Washington, D. C. Each bid must be accompanied by a certified check, payable to the order of the Secretary of the Interior for 2 per cent. of the contract price as a guaranty that the bidder will, if successful, promptly execute a satisfactory contract and furnish bond in the sum of 50 per cent. of the contract price for the faithful performance of the work. The right is reserved to reject any and all bids and to waive technical defects if the interests of the Government require it. Bidders are invited to be present. Proposals must be marked "Proposals for telephone system, Uncompahgre Valley Project, Colorado." THOS. RYAN, Acting Secretary. 7-6t

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SANITARY DISTRICT OF CHICAGO.

Chicago, Ill.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago, and indorsed "Proposals for erecting the superstructures of certain bridges across the extension of the Main Drainage Channel of the Sanitary District of Chicago," will be received by the Clerk of the said Sanitary District at Room 1110 Security Building, Chicago, Ill., until 12 m. (standard time) of Wednesday, the 12th day of October A. D. 1904, and will be publicly opened by said Board of Trustees at a meeting of the Board held that day.

The bridges for which said tenders are invited are two in number and their sites are as follows:

At Ninth Street (Lockport Road) across the extension of the Main Drainage Channel, on Water Power Section One.

At Sixteenth Street (Wire Mills Road) across the extension of the Main Drainage Channel, on Water Power Section One.

The work for which said tenders are invited includes supplying all materials for the superstructures of said bridges and erecting same complete, according to plans furnished by the Sanitary District of Chicago, and in conformity with specifications furnished by the said Sanitary District.

Each bridge will be treated as a single contract in canvassing proposals and making awards.

Each bid for each bridge must be accompanied by a certified check or cash to the amount of one thousand ($1,000) dollars. All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and shall be made payable to the Clerk of the Sanitary District of Chicago. Said amounts of one thousand ($1,000) dollars deposited with bids will be held by the Sanitary District until all of the respective bids for said structure have been canvassed and the contract awarded and signed. The return of said check or cash to the bidder to whom the award of said work shall have been made will be conditioned upon his appearing within ten (10) days after receiving notice of such award, with bondsmen, and executing a contract with the Sanitary District for the work so awarded, and giving a bond satisfactory to the Board of Trustees, for the fulfillment of the contract for the superstructure of each bridge in the amount of ten thousand ($10,000) dollars.

All bids must be upon blank forms furnished by the Sanitary District.

No bid will be considered unless the party making it shall furnish evidence, satisfactory to the Board of Trustees, of his experience and ability in this class of work and his financial ability successfully to prosecute the said contract in case the same shall be awarded to him.

Bidders are required to state in their bids their individual names and places of residence in full.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By Zina R. Carter,
President of its Board of Trustees.
Attest:
S. D. GRIFFIN, Clerk.
Chicago, Aug. 10, 1904. 7-1t

SETTLING RESERVOIRS, ETC.

LEGAL ADVERTISEMENT.

Board of Trustees,
"Commissioners of Water-Works,"
Cincinnati, O.

FOR COMPLETING THE CONSTRUCTION OF SETTLING RESERVOIRS AND THE LAYING OF PUMP MAINS, AND MISCELLANEOUS WORK IN CONNECTION THEREWITH.

Sealed proposals will be received at the office of the Board of Trustees, "Commissioners of Water-Works," of the city of Cincinnati, Ohio, until 12 o'clock noon of Friday, September 9, 1904, for completing the construction of Settling Reservoirs and the laying of Pump Mains and miscellaneous work in connection therewith, near the village of California, in Hamilton County, Ohio, in accordance with plans, specifications and detail drawings on file in the office of the Chief Engineer of the Board of Trustees, "Commissioners of Water-Works."

The same to be paid for as stipulated in the form of contract for the performance of the above work, and which form of contract is on file in the office of the Board of Trustees, "Commissioners of Water-Works."

The reservoirs shall have a holding capacity of about 400 million gallons, with a water area of about 45 acres. The work shall include all the grading, masonry, concrete, asphalt and brick revetment, and inlets and outlets required for the formation of the reservoirs proper; the construction of about 12,500 lineal feet of macadamized roadway; of about 800 lineal feet of sewer pipe drains, the laying of about 5,280 lineal feet of 5-foot and 6-foot pipes and of about 10,830 lineal feet of smaller pipes with all necessary valves and appurtenances.

Plans and detail drawings of the work can be seen, and copies of the specifications, estimated quantities of the work to be done, form of proposal, forms of bonds and form of contract can be secured at the office of the Chief Engineer of the Board of Trustees, "Commissioners of Water-Works."

Bidders must enclose their bids in sealed envelopes, and deposit the same with the Clerk of the Board of Trustees, "Commissioners of Water-Works," before Friday, the 9th day of September, 1904, at 12 o'clock m., and such sealed envelopes must have endorsed thereon the nature of the bid and the name and address of the bidder.

Bids will be opened Friday, the 9th day of September, 1904, at 12 o'clock m., at the office of the Board of Trustees, "Commissioners of Water-Works."

Each bid shall be accompanied by a bond in the sum of $25,000, and signed by two sureties, for the acceptance of the contract, if awarded by the Board of Trustees, "Commissioners of Water-Works," or the bidder may deposit with the Board of Trustees, "Commissioners of Water-Works," in lieu of such bond, a certified check or bank certificate of deposit, payable to the order of the Board of Trustees, "Commissioners of Water-Works," or cash equal in amount to the bond as above required.

Bidders must use the printed forms, as none other will be received.

The Board of Trustees will also receive bids for completing the construction of the Settling Reservoirs and the laying of Pump Mains, and miscellaneous work in connection therewith, in accordance with the plans, specifications and detail drawings, excepting so much thereof as relates to the furnishing of material and doing the work embraced under Item No. 13.

The Board of Trustees will also receive separate bids for furnishing all material and doing all the work embraced under Item No. 13 in accordance with the plans, specifications and detail drawings covering said material and work.

The Board of Trustees, "Commissioners of Water-Works," reserve the right to reject any and all bids.

By direction of the Board of Trustees, "Commissioners of Water-Works."

AUG. HERRMANN, President.
CHARLES G. ROTH, Clerk. 7-1t

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WANTED.—Contractors with ample means to take contract for high-class railway in Canada, 350 miles; part ready for immediate work, balance next spring; payment, part cash, part bonds. Favorable terms to proper parties. References required. Principals only need apply. Address "CANADIAN," care of Engineering News, New York. 7-2t

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